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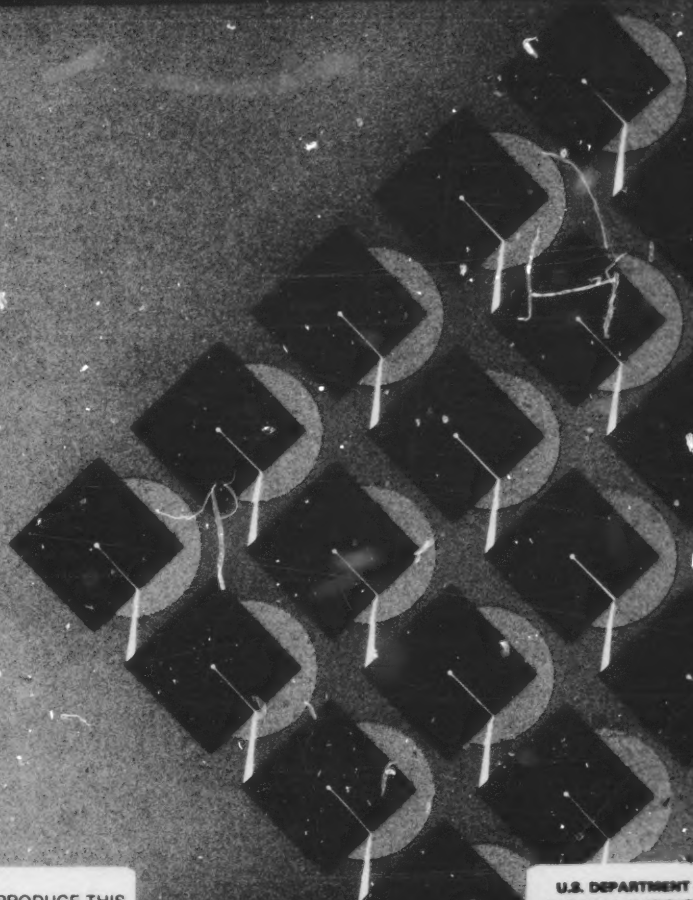
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ABSTRACT

This report presents a discussion of articulation and transfer between community colleges and four-year institutions and points to future directions for transfer education. Chapter I examines the current situation regarding transfer education including background information on transfer enrollments; a summary of the literature on transfer enrollments, and performance and persistence; performance and persistence in California and other states; and the implications of the current situation for public policy. Chapter II discusses statewide articulation and transfer and identifies three types of statewide and/or transfer agreements (i.e., formal and legally based policies, state system policies, and voluntary agreements between individual institutions or systems), and provides examples of each of these types of agreements. This chapter also examines the transfer of vocational-technical credits and the transfer potential of upper-level universities. Chapter III reviews significant developments on the international scene including an assessment of developments in Canada, the United Kingdom, Scandinavia, and Ireland. Finally, chapter IV examines some new developments in transfer education including the shift in attention from traditional college students to "the new clientele"; transfer relationships with business/industry, proprietary schools, and the military; major projects undertaken to promote the study of articulation and transfer; and current trends in the area of articulation and transfer. (HB)

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THE ARTICULATION/TRANSFER PHENOMENON: PATTERNS AND DIRECTIONS



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THE ARTICULATION/TRANSFER PHENOMENON: PATTERNS AND DIRECTIONS

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PREFACE

From a community college perspective, transfer education should be viewed as a vital relationship with both high schools and universities. As the intermediate unit in the total process, the two-year college must remain alert to the importance of maintaining close ties down the educational ladder as well as up. The college functions both as a "receiving" and a "sending" institution. Both roles are equally important. However, this study of the articulation/transfer phenomenon deals exclusively with the community college/university linkage.

In the last several years, a diversity of activities and publications points to a renewed interest in that relationship. The changing profile of transfer applicants, the continuing economic strain felt throughout higher education, and policy pressures from state governments have contributed to this growing interest. Material presented in this monograph examines these and other issues that, at best, should be approached through cooperative action.

It is important that we begin with definitions of the two words used in the title: articulation and transfer. "Articulation" is the generic term referring to the entire range of processes and relationships involved in the systematic movement of students interinstitutionally and intersegmentally throughout postsecondary education. "Transfer" — the mechanics of credit, course, and curriculum exchange — is one of the processes.

As the chapter titles imply and the available material has dictated, Chapters I and III deal primarily with transfer and Chapters II and IV combine discussions of both terms.

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CHAPTER I

TRANSFER EDUCATION: WHAT IS HAPPENING?

Evidence indicating a decline of the community college transfer function continues to appear in the educational literature and in the press. For at least a decade, the movement of community college students to baccalaureate degree-granting institutions has been slowing down. While large numbers of high school graduates entering community colleges intend to complete the bachelor's degree, comparatively few matriculate in senior institutions. Given variations among states and institutions within states, the proportion of transfers within the total community college student body nationwide has been steadily declining.

While this shift is an important consideration in speculating on the future of the community college movement, the decline of the transfer rate does not signal the demise of the transfer function. Instead of being the primary institutional responsibility, transfer is now one of many performed by community colleges (Knoell, 1982). From a national perspective, the percent of full-time, first-time entering freshmen in higher education who enroll at two-year colleges remained the same — 36 percent — from 1971 to 1981, and nearly all those entering community colleges wanted to earn a collegiate degree (Astin and others, 1981; American Council on Education, 1971).

Still, it is important to account for the change in transfer numbers. A variety of explanations have been offered to explain this continuing downward spiral (particularly noted in California through 1980-81). These include deteriorating articulation services for transfers (e.g., orientation, counseling, financial aid, and housing), the lack of community college/university communication regarding the mechanics of transferring courses and credits, competition from universities for ethnic minorities underrepresented in higher education, the lack of uniformity in credit acceptance among the campuses of multiversities, and, in reference to the University of California, the redirection of community college applicants from a first-choice to a next-choice university campus. Other reasons for the decline include the shift in student career interests from academic to occupa-

tional fields, the softening of high school graduation requirements, and the liberal course withdrawal policies that accompanied the de-emphasis of academic education in many community colleges.

The reduction in transfer numbers was initially reported in 1979 by John Lombardi in his important monograph, *The Decline of Transfer Education*. While he discounted the possibility of its ultimate disappearance, Lombardi predicted that as far ahead as the year 2000 the transfer function would not regain its once-preeminent role (Lombardi, 1979, p. 28).

Recently, a qualitative decline in the performance and persistence of transfer students in California has added an ominous overtone to the declining transfer rate. In 1980, a report of the retention and transfer task group of the University of California verified a drop in the academic performance of community college transfers as well as a reduction in their numbers (Kissler, 1980). While no studies in other states confirm this drop, it has long been anticipated by some observers.

TRANSFER ENROLLMENTS: BACKGROUND

Two types of students dominated the early junior colleges: those who were preparing for advanced university study, and those who wanted to "round out" their education with two years of postsecondary education. Lower costs and closer parental supervision persuaded many to remain close to home for university preparatory studies. Whether elongation of high schools, amputations of senior colleges, or decapitations of universities, these early junior colleges were primarily preparatory in nature¹. The strength of this emphasis was due largely to the availability of academic teachers and facilities for first collegiate courses in liberal arts and sciences, low cost in comparison to vocational-technical programs, and the emphasis on transfer-oriented education within regional accreditation associations.

Although the proportion of nonacademic (occupational) courses offered by two-year colleges increased steadily through the decades—reaching a majority by about 1950—the proportion of students enrolled in career subjects did not keep pace. In fact, it was not until the early 1970s that at least half of two-year college enrollments were in career education programs². Transfer students remained in the majority until the beginning of the 1970s. By 1973, the percentage had slipped from about two-thirds of total enrollment to less than 43 percent. Throughout that decade, the number of associate degrees awarded nationwide continued to drop, while total

enrollments grew rapidly, again reflecting the slowdown of the transfer function. For the 1982-83 year, more than 63 percent of all credit students in the nation's community, technical, and junior colleges were enrolled in occupational programs (American Association of Community and Junior Colleges, 1983, p. 3).

Although the number of transfers is now increasing modestly, the transfer percentage of the total student group in American community colleges is diminishing. Only about one-fifth of all students enrolled in two-year colleges currently complete academic programs and move to baccalaureate institutions in the next term (Cohen and Brawer, 1982, p. 54).

TRANSFER ENROLLMENTS: SUMMARY OF THE LITERATURE

Throughout the early decades of the junior college movement, actually until the 1960s, transfer education carried about two-thirds of total enrollments. Comprehensive studies by Eells (1928, 1941) and Medsker (1960) verified the transfer dominance. By 1973 the balance had shifted. A study by Parker (1974) for the American College Testing Program showed transfer enrollments at 43 percent. The decline was due, in part, to the weakening of humanities programs as described by Brawer and associates (1978). Later, Lombardi published the results of a three-state analysis, including California, Florida, and Washington. The proportion of transfer students in the 1970s was more than half of total student body enrollments in only two states—Florida and Washington (Lombardi, 1979, p. 13).

¹This terminology was developed by Lange (1917).

²The development of the two functions, academic preparation and non-academic (occupational) education, is detailed in chapters 8 and 11 of *The American Community College* (Cohen and Brawer, 1982).

Table 1
SELECTED DATA ON TRANSFERS FROM CALIFORNIA, FLORIDA, AND WASHINGTON
COMMUNITY COLLEGES TO UNIVERSITIES AND FOUR-YEAR COLLEGES

Fall	California					Florida					Washington				
	Number of Transfers	% Inc.	Head- count Enroll- ment	% Inc.	Ratio Trans. to Enroll.	Number of Transfers	% Inc.	Head- count Enroll- ment	% Inc.	Ratio Trans. to Enroll.	Number of Transfers	% Inc.	Head- count Enroll- ment	% Inc.	Ratio Trans. to Enroll.
1973	41,282		856,400		4.8	13,744		134,223		9.9	4,568		137,663		3.3
1974	40,459	-2	977,235	16	4.1	14,040	5	148,804	11	9.4	4,764	4	146,784	7	3.2
1975	43,539	8	1,119,300	15	4.1	15,585	11	169,788	14	9.2	4,584	-4	159,386	9	2.9
1976	39,776	-9	1,096,800	-2	3.6	14,642	-6	172,742	2	8.5	4,545	-1	154,564	-3	2.9
1977	40,393	2	1,114,000	2	3.6						4,236	-7	171,068	11	2.5
1978											3,852	-9	180,922	6	2.1
	1973- 1977	-2		30		1973- 1976	10		29		1973- 1978	-16		31	

Note: For California and Florida, transfer data are for transfers to the public state universities and four-year colleges; for Washington, transfers to all universities and four-year colleges. Enrollment is the opening Headcount for the Fall of each year.

Source: Lombardi, 1979 p. 12.

Commenting on the significance of the data, Lombardi pointed to the wide variation in the percentage of transfers among the states and to the lower growth rate of the transfer numbers, as compared to total enrollments. He called attention to the need for a standard definition of a "transfer student" and for a uniform methodology for reporting enrollments. While he referred to the transfer education situation as "discouraging," he found it "far from moribund" (Lombardi, 1979. p. 27).

TRANSFER ENROLLMENTS: THE CURRENT SCENE

Table 2 displays transfer data on all three "Lombardi states" (California, Florida, and Washington) along with figures for six other states: Illinois, Maryland, Minnesota, New Jersey, North Carolina, and Virginia.

Table 2

COMMUNITY COLLEGE TRANSFERS IN SELECTED STATES

State	Numbers and Years			Interpretation
<u>California</u>	To UC	To CSU	Totals	
	5,649-1979	30,428-1979	36,077-1979	While 1983 (fall) increases were small, the trend of decreasing numbers appears to have stopped.
	5,428-1980	30,490-1981	35,918-1980	
	4,778-1981	30,026-1981	34,804-1981	
	5,137-1982	29,824-1982	34,961-1982	
	5,305-1983	30,274-1983	35,579-1983	
Source: California Postsecondary Education Commission, (1984a).				
<u>Florida</u>	To public universities			
		1,794-1978		In the Fall of 1982, 36.8% of all students in the State University System were Florida community college transfers.
		2,573-1979		
		2,808-1980		
		4,097-1981		
		4,878-1982		
Source: Florida State Department of Education, (1981, 1983).				
<u>Illinois</u>	To public universities			
		8,881-1976		
		10,015-1979		
Source: Bragg, (1982).				
<u>Maryland</u>	To all four-year universities			
		5,012-1979		40% of community college graduates transferred in 1978; 41% in 1980.
		5,231-1980		
		4,867-1981		
Source: Maryland State Board for Community Colleges, (1983).				
<u>Minnesota</u>	To the University of Minnesota			
		1,287-1980		1. Undergraduate transfer increased 13% from 1977-80 to 1980-81. 2. Transfer numbers increased in public but decreased in private senior colleges from 1979 to 1981. 3. About 25% of senior college students are transfers.
		1,537-1981		
Source: Minnesota Higher Education Coordinating Board, (1982).				

Table 2 (continued)

State	Numbers and Years			Interpretation
<u>New Jersey</u>	To all four-year colleges			
	<u>Full-time</u>	<u>Part-time</u>	<u>Totals</u>	
	3,723-1973	1,735-1978	5,458-1978	1981 enrollments reversed the downward pattern, only to lose again in 1982.
	3,650-1979	1,833-1979	5,483-1979	
	3,224-1978	1,868-1980	5,092-1980	
	3,550-1981	1,801-1981	5,351-1981	
	3,052-1982	1,698-1982	4,650-1982	
Source: New Jersey State Department of Education (1984).				
<u>North Carolina</u>	To the University of North Carolina			
		1,535-1972		Fall 1982 figures are 3.6% over 1981. Fall 1982 reverse transfer numbers show a 6.9% decrease from 1981.
		2,071-1975		
		2,073-1978		
		2,230-1979		
		2,223-1980		
		2,096-1981		
		2,171-1982		
Source: The University of North Carolina (1983).				
<u>Virginia</u>	To all four-year public institutions			
		2,012-1973		More recent enrollment data indicate modest increases from 1973 through 1977.
		2,129-1974		
		2,330-1975		
		2,456-1976		
		2,467-1977		
Source: Virginia Community College System (1979).				
<u>Washington</u>	To all universities and four-year colleges			
		4,584-1975		1982 figures reversed the downward pattern, but not to the strength of 1975 and 1976.
		4,545-1976		
		4,236-1977		
		3,852-1978		
		4,014-1982		
Source: Lombardi (1979) and University of Washington (1983).				

Acknowledging the unevenness of the information gathered for Table 2, the data suggest, nevertheless, that 1980 and/or 1981 were the low periods for transfer enrollments in six of the states. The decline in absolute numbers is graphically noted in California where the number of community college students transferring to the University of California shrank by 35 percent from 1973 through Fall 1980, and the number of students transferring to the State University dropped by about 14 percent between 1975 and 1979. During the same period, transfer enrollments in independent senior institutions increased significantly (California State Postsecondary Education Commission, 1982, p. 15). Data for 1981 and/or 1982 suggest a reverse in this trend. During Fall 1982, the net increase of community college entrants into both senior segments in California was approximately 0.5 percent. While numbers improved by some 350 between Fall 1981 and Fall 1982 on University of California campuses, the State University dropped by about 200 (California State Postsecondary Education Commission, 1983, pp. 1, 6, 7, 14). As displayed in Table 2, Fall 1983 figures again improved in both senior segments. Unlike California, transfer enrollments have increased in Florida without interruption.

The reverse transfer phenomenon, now an emerging feature of the transfer scene, was initially recognized in an analysis of 1967-1968 undergraduate students in Illinois (Darnes and others, 1971). Public junior colleges were receiving more transfer students than they were sending. Other states reported substantial "drop-down" numbers at that time, including North Carolina (Kintzer, 1973, p. 3) and Oklahoma; the Oklahoma data indicate that more students transferred from four- to two-year colleges than from two- to four-year institutions (Oklahoma State Regents for Higher Education, 1983, p. 46).

The major subdivision of the reverse transfer group consists of baccalaureate (or higher) degree holders who return to a community college for training in a more salable career. While statistical evidence is lacking, the scattering of available reports, almost entirely from individual institutions, suggests the growing importance of reverse transfers in curriculum development. Community colleges note the advisability of diversifying the most productive career programs to accommodate this growing population.

The small number of states collecting transfer statistics, and the lack of definition and reporting uniformity among those who do, severely limit the meaning of the data at hand. In fact, the situation should be recognized as an embarrassment—a warning to educators

to get their act together. Such information is vital to state policy makers and legislators who control purse strings, and the plea for serious reporting of crucial information must be acted upon. As Cohen points out: "A single college, a single state may have more or less reliable information but it is impossible to compare with the corresponding data from other colleges and other states because of the varying definitions and reporting procedures employed" (Cohen, 1979, p. 3). We can ill afford to continue this glaring inattention.

PERFORMANCE AND PERSISTENCE: SUMMARY OF THE LITERATURE

From the beginning of the junior college movement, performance and persistence of transfer students progressing through higher education systems have been consistently monitored. Performance records continued to be positive throughout the 1950s and 1960s. Summarizing a number of national studies dating from 1928 through 1954, Bird concluded that "junior college transfers make records approximately the same as those made by transfers from four-year colleges and by native students, sometimes excelling slightly and sometimes being slightly excelled by the other groups" (Bird, 1956, p. 85). The author further accounted for "transfer shock" (a grade point drop recorded temporarily and immediately after transferring) and pointed out that doubt about the quality of junior college preparatory work no longer existed. Since then, virtually all performance and persistence studies have accounted for the "transfer shock" phenomenon. Early studies also suggested that transfer students tended to retain their relative academic rankings held before transferring; those having high grades before transfer attained a similar success level in the university setting. The reverse relationship was also predictable.

About a decade after Bird's work, Knoell and Medsker (1965) released their landmark report. GPA (Grade Point Average) differences between native students and junior college transfer students were found to be only slight at the point of graduation. Knoell and Medsker also found that the transfers—some 2,300 in 10 states—were equally as efficient as native students in total number of terms attended and in credits earned toward the baccalaureate. The authors concluded that junior colleges were providing an important avenue toward the baccalaureate for many who would not otherwise have been able to undertake academic work (Knoell and Medsker, 1965, pp. 95-96).

A transfer/native student study conducted during the mid-1960s at UCLA yielded similar findings. Approximately 1,800 entering first-year students were compared with 800 community college transfers. After three semesters, grade point differences between the two groups had progressively lessened to an insignificant level. Students ineligible to attend UCLA from high school were also in the transfer cohort, and that spoke well for the quality of community college preparatory work (Kintzer, 1967, p. 472). "Transfer shock," identified by Knoell and Medsker (1965) and Hills (1965), was also present in the UCLA study.

In a recently completed dissertation, Menke (1980) reviewed the literature on performance and persistence of transfers. About one-half of the 100 studies mentioned found that the academic performance of native students was better than the academic performance of transfers, and about one-third found no significant difference. A much smaller number of the remaining investigations showed that transfers, as upper-division students, exceeded native student performance (Menke, 1980, p. 10). As the author cautioned, however, drawing generalizations from this collection of disparate studies is not wise, since some were specialized reports representing small numbers of schools.

Several statewide studies completed in Illinois reported conflicting performance success. Anderson (1977) found that community college transfers at the University of Illinois earned lower GPAs than four-year college transfers and continuing (native) juniors, despite the fact that the community college cohort entered the University with equivalent grade averages. More of these transfers were on academic probation, and their dropout rates were higher than transfers from four-year institutions (Anderson, 1977). However, a three-year longitudinal persistence study completed by Moughamian and others (1978) showed that after two years at the University of Illinois, 82 percent of community college transfers had either graduated or were still enrolled (Moughamian and others, 1978).

In summary, performance and persistence studies, like transfer reports, vary considerably from state to state and school to school. An overview of the findings of some 35 transfer studies conducted between 1966 and 1969 illustrates this variation (Richardson & Doucette, 1980, pp. 91-94). Such factors as differences in matriculation standards for transfers; differences in institutional characteristics such as size, calendar format, and the quality of articulation services provided; and curricular and pedagogical variations circumscribe the meaning of available data.

³The phrase "transfer shock" was first used by Hills (1965).

PERFORMANCE AND PERSISTENCE IN CALIFORNIA

Several recent California studies examining student cohorts from the mid to late 1970s indicate a negative side of transfer student performance and persistence. The size of the transfer cohorts examined in these research efforts forces serious consideration of the conclusions reached.

The doctoral research of David Menke (1980) focused on transfer and native students who graduated between 1976 and 1978. Menke found that even when matched on SAT scores, the natives had higher graduation GPAs than transfers. Transfer students also took longer to earn degrees. Dropouts were not considered. The author concluded that since native students performed better than transfers, community colleges sending graduates to UCLA may not be preparing them well enough for the upper division. Menke also suggested that socioeconomic status (SES), different levels of parental support, motivation, and goals could account for the variance (Menke, 1980, pp. 74-75, 79). The data also implied that serious science students, as a group, prefer to go directly to the university rather than begin lower-division studies at a community college.

Another large research effort employing student cohorts in the 1975-1978 period was undertaken by the University of California Systemwide Task Group on Retention and Transfers. University undergraduate enrollments indicated that community college transfers earned lower grades than native juniors, were more likely to be on probation, and were less likely to graduate (Kissler, 1980, p. 7). The performance gap between transfers and natives during the 1975-1978 period appeared to have widened over previous decades.

The most recent material released by the University of California on first-year performance of community college transfers suggests that "most transfers are adequately prepared for the University and achieve an acceptable level of performance on University of California campuses" (University of California 1984, P. 8). As shown in Table 3, the average difference between GPA transferred to the University by community college graduates and initial GPA earned during the first university upper-division year was one-half of a grade point—the normal "transfer shock" drop. The first-year upper-division GPA of "natives" (2.96) and "transfers" (2.92 for transfers who were eligible for UC enrollment upon high school graduation and 2.67 for those who were not eligible upon high school graduation) compared favorably.

Table 3

**COMPARISON OF THE 1982-83 ACADEMIC PERFORMANCE
OF REGULARLY ADMITTED FALL 1982 COMMUNITY
COLLEGE TRANSFER STUDENTS WITH COHORTS WHO
TRANSFERRED FROM FOUR-YEAR INSTITUTIONS AND
NATIVE FRESHMEN WHO BECAME JUNIORS FALL 1982**

	Native Freshmen Who Became Juniors	Transfers from 4-Year Colleges	Community College Transfers	
			Eligible from High School	Ineligible from High School
Lower Division Grades	3.03	3.11	3.32	3.18
First Year Upper Division Grades	2.96	2.69	2.92	2.67

Source: University of California (1984).

The most recent data on baccalaureate degree completion of community college transfer students at UCLA indicate that 53 percent of the transfer students entering the university in 1976 earned a bachelor's degree (see Table 4). However, fourth-quarter persistence rates for students entering UCLA in 1980 (83 percent) and for those entering the University of California, Berkeley (UCB) in 1980 (82 percent) are encouraging. (See Table 5.) Though the data on Tables 4 and 5 are obviously not comparable, the difference in persistence rates between the 1976 and 1980 cohorts suggests that there may be some improvement. This information further intimates that UCLA's retention of community college transfers is slightly better than the University's overall rate and that UCB's community college transfers are not as likely to persist as transfers at other campuses (University of California, Los Angeles, 1984, p. 1).

Table 4

**COMPARISON OF THE ACADEMIC PERFORMANCE OF
TRANSFERS FROM THE CALIFORNIA COMMUNITY
COLLEGES OR THE CALIFORNIA STATE UNIVERSITY AND
COLLEGES WITH UNIVERSITY OF CALIFORNIA FRESHMEN
WHO BECAME JUNIORS AT UCLA IN 1976**

Source	Lower Division GPA	N	Upper Division GPA	Percent on Probation	First Year Attrition in Academic Difficulty	Percent Who Graduate
California	N.A.	23	2.18	66	61	30
Community	2.0-2.4	22	1.94	73	55	27
Colleges	2.4-2.8	188	2.13	82	36	37
	2.8-3.2	242	2.45	62	25	53
	3.2-3.6	221	2.84	31	11	62
	3.6-4.0	138	3.22	19	7	71
Total		834	2.59	51	22	53
California	N.A.	4	2.08	75	50	25
State	2.0-2.4	7	2.37	86	14	57
University	2.4-2.8	44	2.36	64	25	55
and	2.8-3.2	56	2.75	45	9	71
Colleges	3.2-3.6	45	3.05	23	6	87
	3.6-4.0	29	3.35	5	11	84
Total		177	2.77	42	14	71
University	N.A.	36	2.56	39	42	36
of	2.0-2.4	262	2.52	60	12	68
California	2.4-2.8	505	2.78	43	8	75
	2.8-3.2	491	3.06	23	4	82
	3.2-3.6	380	3.40	11	3	88
	3.6-4.0	190	3.67	7	1	91
Total		1,864	3.04	30	6	80

Source: Kissler, and others (1981, p. 20).

Table 5

NUMBER OF ENROLLED JUNIOR TRANSFER STUDENTS AND THEIR FOURTH QUARTER PERSISTENCE

Year	Community College Transfers				All Transfers				
	UCLA		UCB		UCLA		UCB		UCB
	#	%	#	%	#	%	#	%	#
1980	732	77	426	80	1,401	75	698	81	860
1981	851	80	362	86	1,768	79	570	85	669
1982	701	83	383	82	1,202	82	648	85	764

Source: University of California, Los Angeles, (1984).

In summary, declining performance and persistence rates of community college transfers, as well as declines in the number of transfers, were most pronounced in California during the 1970s. In addition to reasons mentioned at the beginning of this chapter, two other factors contributed to this decline: the growing career orientation of entering students and the underpreparation of high school graduates. Both conditions, of course, are not confined to a single state. However, gains in performance and persistence, as well as numbers, suggest a possible turn for the better.

Another factor should also be considered. Varying matriculation and screening policies among University of California campuses, and quite likely among campuses of other multiversities, account for different performance and retention levels. In fact, it is virtually impossible to compare transfer policies of the nine UC campuses, because screening rules are now set by the several faculties, not by a systemwide authority. Furthermore, the trend is toward higher selectivity of transfer applicants on a campus-by-campus, college-by-college basis. While university systems undoubtedly vary in terms of centralization of authority, we suspect that higher transfer selectivity is a nationwide phenomenon.

OTHER STATES

Studies on community college transfer performance and persistence have also been completed in Arizona, Florida, Illinois, and Maryland.

Table 6
PERFORMANCE OF AGGREGATE STUDY GROUPS

	Average Cumulative Grade Point						Average of Continuers		
	ASU			U of A			NAU		
	Nat	CC1	CC2	Nat	CC1	CC2	Nat	CC1	CC2
Entry Grade									
Point Average	2.79	2.86	3.09	2.69	3.23	3.15	2.35	2.69	3.05
1st Semester	2.77	2.28	2.61	2.77	2.38	2.50	2.49	2.22	2.76
2nd Semester	2.89	2.52	2.82	2.84	2.50	2.61	2.59	2.37	2.79
3rd Semester	2.93	2.61	2.82	2.84	2.56	2.63	2.63	2.49	2.81
4th Semester	2.97	2.74		2.87	2.63		2.64	2.53	
5th Semester	2.97	2.74		2.86	2.62		2.67	2.61	

Nat — Native University Students

CC1 — Those students completing one year at a community college before transfer.

CC2 — Those completing two years at a community college before transfer.

Source: Richardson and Doucette (1980, p. 8).

However, only the Arizona report includes transfer/native comparisons.

Arizona. Richardson and Doucette (1980,1982) conducted a comprehensive examination of the performance, persistence, and degree completion of community college transfer students at three Arizona public universities (Arizona State University, the University of Arizona, and Northern Arizona University). Data were collected for (1) students who had transferred to a public university in Fall 1976 after completing the equivalent of one year at a community college; (2) students who had transferred to a public university in Fall 1977 after completing the equivalent of two years at a public university; and (3) native university students who had completed 24 to 36 credit hours by 1976. Comparisons of performance measured in terms of GPA and degree achievement (Tables 6 and 7) suggest that "if there is a trend toward declining performance on the part of community college students, it has yet to reach Arizona" (Richardson and Doucette, 1982, p. 12).

Table 7

DEGREE ACHIEVEMENT OF AGGREGATE STUDY GROUPS

	Percentage of Original Group Graduated								
	ASU			U of A			NAU		
	Nat	CC1	CC2	Nat	CC1	CC2	Nat	CC1	CC2
Spring 1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fall 1978	3.0	2.7	4.9	4.7	1.5	2.8	4.0	1.1	0.0
Spring 1979	31.4	10.2	25.9	32.6	13.1	28.0	6.9	37.0	10.5
Fall 1979	46.9	17.0	43.7	43.9	30.8	41.8	14.9	48.1	26.3

Nat — Native University Students

CC1 — Those students completing one year at a community college before transfer.

CC2 — Those completing two years at a community college before transfer.

Source: Richardson and Doucette (1980, p. 11).

As data in Table 6 demonstrate, transfer students at the three public universities recovered after "transfer shock" to earn a GPA that was comparable to the GPA earned by native students. In all three cohorts, the native/community college differential was less than one-quarter of a grade point. In degree achievement, Arizona transfers completed baccalaureates at rates comparable to natives at the University of Arizona and at Arizona State University. Sampling at Northern Arizona University was judged inadequate. As one would anticipate, a much smaller number of transfers with a single year at a community college graduated in three and a half or four and a half years after high school (Richardson and Doucette, 1980, p. 9).

The researchers concluded that given equally well-prepared students, community colleges "perform every bit as well as their university counterparts" (Richardson and Doucette, 1982, p. 13). This statement is reminiscent of the above-mentioned conclusion reached by Bird (1956) on the quality of lower-division work attributed to the early junior college. But we are again reminded to avoid generalizations—quick conclusions—from limited situations. Illustrations of the positive and negative positions do not represent the entire community college movement. A comprehensive research

program involving numerous state systems is required.

Florida. Descriptive statistics on Florida's community college transfer students are regularly published by the Division of Community Colleges within the State Department of Education. While various transfer groups can thereby be compared longitudinally, transfer/native evidence is not provided. These data suggest, nonetheless, that community college lower-division preparation is comparable to that provided by the statewide University System. Indeed, most transfers—82 percent in 1982—earned at least a 2.00 GPA in the State University System, and students transferring 60 semester hours earned significantly higher GPAs than those transferring less than 60 (Florida State Department of Education, 1983, p. 2).

Illinois. The Illinois Community College Board studied the post-transfer success of three groups of community college transfers: those who had obtained an associate of arts (A.A.) or an associate of science (A.S.) degree, those who had earned an associate of applied science (A.A.S.) degree, and those who had not earned an associate degree. Performance comparisons with native university students were not measured. While, again, not directly related to the purpose of this review (comparisons of natives and transfers), the results were germane to the broader issue of community college academic degree quality. The A.A./A.S. degree completers performed, as a group, better in all measures, i.e., retention, baccalaureate degree completion, and cumulative GPA (Bragg 1982, p. 10). It is also appropriate to note the final recommendation for stronger articulation (transfer student services): "Admissions criteria and articulation agreements need continuous examination as do advising, counseling, and orientation processes to facilitate a smoother transition and to ameliorate the effects of "transfer shock" for two-year to senior institution transfer students" (Bragg, 1982, p. 10).

Maryland. Several Maryland data sources suggest that community college students perform well after transferring into the university system. As shown in Table 8, over 95 percent of the respondents to a statewide survey earned GPAs of at least 2.0 and about three-fifths had GPAs of 3.0 or higher.

Table 8
GRADE POINT AVERAGE OF
COMMUNITY COLLEGE STUDENTS AFTER TRANSFER

Grade Point Average	Entrants				Graduates	
	1972	1974	1976	1978	1978	1980
Below 2.0	3%	3%	3%	3%	2%	2%
2.0-2.4	4	11	13	14	12	12
2.5-2.9	30	28	28	28	26	26
3.0-3.4	35	35	34	33	35	35
Above 3.5	18	23	22	22	24	25

Source: Maryland State Board for Community Colleges, May 1983, p. 13.

(Note: "The report examines data from four surveys of students who were questioned four years after they first entered a Maryland community college and from two surveys of community college graduates who were questioned one year after graduation." p. xii)

Additional data from the University of Maryland College Park campus indicate that the proportion of transfer students dismissed—less than 6 percent—is similar to that of upper-division native students (Maryland State Board for Community Colleges, 1983, p. 14).

Summary. While transfer/native student performance comparisons are forthcoming from only one state, several others contribute related information connoting positive relationships. Because available research lacks uniformity in purpose and methodology, it is not possible to draw conclusions beyond a single institution, system, or state. We again call attention to the overdue need for uniform definitions and reporting formats in research planning.

IMPLICATIONS FOR PUBLIC POLICY

Community colleges are placed in a most difficult position. Universities are strengthening transfer selectivity and states are showing increased interest in assessing college-level academic attainments. High

schools continue to release less-qualified graduates. As this gap widens, community colleges must first provide remediation, then ready the survivors for lower — division education, and next, prepare transfer aspirants on equal terms with university natives. This combination poses almost insurmountable difficulties, particularly for districts serving economically depressed sections of the country.

How can community colleges meet the challenge? Partnerships with high schools on the preparatory edge and with universities at the completion edge are essential. Academic curriculum planning partnerships, for example, can be a great deal of help. In California, a document prepared by academic senate representatives of the three public higher education segments outlines competencies expected of entering college freshmen in English and mathematics. The document was designed to assist junior and senior high school teachers in curriculum development and to prepare students for a successful collegiate experience in these basic disciplines (The Academic Senate of the California Community Colleges, 1982, p. iii). Similar statements in other academic areas are in preparation.

Community colleges can do much for themselves. One possibility is the establishment of regional priorities within urban districts. For example, a district could concentrate remediation at colleges with constituencies that are least likely to be ready for collegiate studies following high school graduation. District colleges located in other geographic areas could emphasize lower-division courses where high school graduates are better qualified.

Early identification of academic deficiencies and accurate up-to-date advisement are essential, particularly for community colleges. The Advisement and Graduation Information System (AGIS) operational at Miami-Dade Community College (Florida) monitors student progress toward the baccalaureate. Counselors and students are instantaneously alerted to general education and major field requirements at senior institutions. (See Schinoff and Kelly, 1982.)

Other microcomputer data banks have been announced. For example, a broad-based information system is being developed by the League for Innovation in the Community College. The League system, like AGIS, will be available to students and counselors, providing "computer conversations" on transfer requirements and a wide variety of processes and services. On the university ledger, the microcomputerized information system of the University of California, Irvine, is now operational throughout the Los Angeles Community College District. Matching and mapping are two of the utilities of the so-called "N-on-N" system — matching courses of both

sending and receiving institutions, and mapping courses taken against courses offered. Artistic features (threatening or user friendly?) are yet to be developed.

In California several statewide organizations are now giving articulation and transfer priority attention, including the Board of Governors of the California Community Colleges, the Academic Senate for the California Community Colleges, and the California Postsecondary Education Commission (CPEC). In particular, the work of the Ad Hoc Committee on Community College Transfer initiated by CPEC may be a catalyst for widespread efforts to understand and assess transfer education. Among other goals, the Ad Hoc Committee will consider recommendations to improve the flow of community college transfers through university degree programs (California State Postsecondary Education Commission, October 1984b, p. 1).

Solving articulation and transfer issues is a cooperative responsibility. Changes in institutional practice should be based on reaffirmations of public policy. As the California Ad Hoc Committee report indicates: "Secondary schools, the community colleges, the University and the State University are all partners in assuring the smooth flow of students through the system to whatever level they are motivated and academically able to achieve" (California State Postsecondary Education Commission, October 1984b, p. 20).

This section on transfer education has been largely concerned with the number of transfer students moving from community colleges to senior institutions, and with performance and persistence comparisons of transfers and native university students. In the next chapter, we turn attention to statewide articulation and transfer relationships. Rather than a state-by-state anecdotal approach, the discussion will focus on patterns of agreements and creative approaches to statewide policy making and coordination. Efforts of particular institutions or systems will also be reported and compared.

CHAPTER II

STATEWIDE ARTICULATION AND TRANSFER

Articulation/transfer relationships have existed from the beginning of the two-year college movement. Appearing first as informal arrangements in the Midwest and soon in the West as junior colleges were opened in California, formal agreements were gradually negotiated in areas where the number of transfer applicants demanded that attention or where a degree of cordiality had developed between universities and junior colleges. Progress can be identified in several dimensions: documents in the form of equivalency guides issued by institutions, agreements negotiated by individual colleges and universities or by segments within a state, and guidelines and policies developed and controlled by state agencies or commissions. Material in this chapter will concentrate on the last dimension—statewide articulation and transfer agreements that now exist in various forms in about 30 states.

The involvement of state agencies and commissions, particularly state government via legislation or education code action, is a recent phenomenon. Despite strong recommendations from authors, including Medsker's (1960) endorsement of the importance of state coordination, formal action did not occur until 1971. In April of that year, after nearly ten years of negotiations, the Florida State Department of Education placed into action the Florida Formal Agreement Plan. In the same year, an articulation/transfer plan described as "legally-based" was adopted by the Illinois Board of Higher Education. A third state, Georgia, announced a core curriculum formula to be followed by all junior and senior colleges, and Texas formed a modified version of the core for all two-year colleges.

Later in the 1970s, at least four other state plans were announced: The Massachusetts Commonwealth Transfer Compact, the New Jersey Full-Faith-and-Credit Policy, The Oklahoma Articulation Plan, and The Nevada University System Articulation Policy. Other states, including Arizona, Kentucky, Maryland, North Carolina, Rhode Island, Virginia, and Washington, announced statewide guidelines and/or policies. Segments of statewide systems,

such as the California State University System, negotiated flexible agreements with two-year colleges.

Special attention to transfer of vocational-technical education was initiated in 1971 by the North Carolina Joint Committee on Articulation and by the Ohio Advisory Commission on Articulation Between Secondary Education and Ohio Colleges. Most recently, a policy on transfer of courses from independent postsecondary (proprietary) schools to community colleges was announced by the community college and higher education boards for the state of Maryland. While this state activity represents significant and rather widespread progress toward much-needed coordination, other states now adding two-year college systems remain insufficiently organized to provide coordination of articulation services and transfer credit¹.

PATTERNS OF STATEWIDE AGREEMENTS

Kintzer (1973) identified three types of statewide articulation and/or transfer agreements: (1) *formal and legally-based policies*, e.g., Florida and Illinois; (2) *state system policies*, e.g., North Carolina and Washington; and (3) *voluntary agreements between individual institutions or systems*, e.g., California and Michigan (Kintzer, 1973, chapters 4, 5, and 6). The first two patterns, Kintzer determined, were included in about half of the states. In the rest, the processes of transfer were handled on an individual basis, and articulation services provided were minimal. Since then, the national scene appears not to have changed significantly in terms of total state involvement. The three agreement categories are still viable even though several states have been reclassified. (See Table 1.)

¹For a detailed discussion of the history of state government involvement, see Kintzer (1973), Menacker (1975), and Kintzer (1976).

Table 1

PATTERNS OF ARTICULATION/TRANSFER AGREEMENTS

I. Formal & Legally Based Policies	II. State System Policies	III. Voluntary Agreements Between Institutions or Within Systems	Specializing in Vocational- technical credit Transfer
<u>Florida</u> <u>Georgia</u> <u>Illinois</u> <u>Massachusetts</u> * <u>Nevada</u> <u>Rhode Island</u> * <u>South Carolina</u> <u>Texas</u>	<u>Alaska</u> <u>Arizona</u> * <u>California</u> <u>Hawaii</u> <u>Kansas</u> <u>Kentucky</u> <u>Maryland</u> <u>Minnesota</u> <u>Mississippi</u> <u>Missouri</u> <u>Nebraska</u> * <u>Nevada</u> <u>New Jersey</u> * <u>New York</u> * <u>North Carolina</u> <u>North Dakota</u> <u>Oklahoma</u> * <u>Pennsylvania</u> <u>South Carolina</u> <u>Utah</u> <u>Virginia</u> <u>Washington</u> <u>West Virginia</u> <u>Wisconsin</u>	<u>Alabama</u> <u>Arkansas</u> * <u>California</u> <u>Colorado</u> <u>Connecticut</u> <u>Delaware</u> <u>Idaho</u> <u>Iowa</u> <u>Louisiana</u> <u>Maine</u> * <u>Michigan</u> <u>Montana</u> <u>New Hampshire</u> <u>New Mexico</u> * <u>New York</u> * <u>Oregon</u> <u>Pennsylvania</u> <u>South Dakota</u> <u>Tennessee</u> <u>Vermont</u> <u>Wyoming</u>	<u>Indiana</u> * <u>Michigan</u> * <u>North Carolina</u> <u>Ohio</u> * <u>Oregon</u>

* = states placed in more than one category.

Characteristics of the several categories are discussed in Chapter II.
Underlined states are discussed in the monograph.

The distinguishing characteristics of the formal and legally-based patterns are (1) the breadth of general education requirements offered by both two- and four-year institutions, (2) timing stipulations regulating when each level can legitimately offer required courses, and (3) policies pertaining to articulation services that facilitate the movement of students through the systems. In Florida, Georgia, Texas, and Illinois, all sectors of higher education were involved from the start with policy planning in task forces developed under the aegis of a state body, such as the state board, the university, or a coordinating council or commission (Kintzer, 1973, p. 35).

State plans placed under the second type tend to emphasize the details of transfer. State bodies responsible for two-year college education are more controlling than coordinating. Heavy responsibility for policy development and implementation is held by the state, often through an agency of government such as the Oklahoma State Regents for Higher Education; the University Boards of Regents in Hawaii, Kentucky, and Nevada; the University of Wisconsin Center System; and The Board of Trustees of the State University of New York (Kintzer, 1973, p. 52).

Two states, California and Michigan, are the clearest examples of the third pattern. The responsible organizations in these states voluntarily reach decisions by mutual agreement rather than by state edict; the work is shouldered by *ad hoc* joint liaison committees. Voluntary cooperative effort is a strength, and financing, management, and communication are persistent difficulties (Kintzer, 1973, p. 96).

The Formal and Legally Based Pattern

Three of the states in the first classification have changed significantly since the 1973 Kintzer monograph. Three other states (Massachusetts, North Carolina, and Rhode Island) have since been added to the list of those with legally-based policies. However, developments in North Carolina will be discussed in a separate section focusing on vocational-technical education.

The Florida Formal Agreement Plan. The Florida Plan was the first statewide agreement on general education requirements. Approved by the State Board of Education in 1965 (three years earlier than the Georgia Core) and reconfirmed in 1971, the pact was based on the belief that transfer should be accomplished without administrative interference and that protection of the integrity of institutions was paramount. This crucial feature was announced in the third

paragraph of the agreement: "After a public institution of higher learning in Florida has developed and published its program of general education, the integrity of the program will be recognized by the other public institutions of Florida. Once a student has been certified by such an institution as having completed satisfactorily its prescribed general education program, no other public institution of higher learning in Florida to which he may be qualified to transfer will require any further lower-division general education courses in his program" (Florida State Department of Education, 1971).

The concept of "first party" — "third party" relationships was introduced in this policy². The notion of institutional primacy in establishing and applying transfer policies and practices affecting itinerant students remains a basic premise as state government improves its position in the struggle for control of articulation and transfer. Third-party assistance from the state in support of unilateral action of institutions and coordination among several includes arranging opportunities for interinstitutional negotiation, legitimizing forthcoming policies, developing assessment instruments, evaluating results, exchanging information, and funding experimental arrangements.

Two recent developments in Florida have significantly changed the original plan: a statewide common calendar and the adoption of the College-Level Academic Skills Test. All Florida universities and community colleges were placed on the same academic calendar and numbering system in February 1980 by the State Board of Education. This numbering system is administered by an agency within the State Board of Education. All new courses now receive numbers or approval of suggested numbers by this state agency. The College-Level Academic Skills test, an achievement test developed by the Florida Department of Education designed to measure college-level communication and computation skills, was developed for use in universities and community colleges beginning October 1982. The test has been scored and normative data have been developed. A cut-off score has not, however, been established. The Commissioner of Education anticipates recommending cut-off scores within the next few administrations of the test. When a cutoff score is established, those not achieving that score will not be permitted to continue in upper-division studies at a Florida public university.

²The concept specifies "first parties" as individual institutions, "second parties" as the coordinated action of more than one institution, and "third parties" as the State (The Association Transfer Group, 1974).

The Texas Modified Core. The statute that created the Coordinating Board of the Texas College and University System directed the new Board to develop a basic core of general academic courses that, when offered at a junior college during the first two collegiate years, "... shall be freely transferable among all public institutions of higher education in Texas who are members of recognized accrediting agencies on the same basis as if the work had been taken at the receiving institution" (Texas Education Code, Chapter 61.051, paragraph g). "General academic courses" refers to those normally covered in the first two years of a baccalaureate program, and the term "freely transferable" means that full credit should be awarded if the courses are considered requirements for the bachelor's degree.

The various core curricula developed during the intervening years were evaluated in 1981, and the general provisions included in the original directive were updated and expanded. Two of the 1981 additions should be mentioned. First, "every institution was urged to appoint an articulation officer who would be responsible for dissemination of information and coordination of transfer credit evaluation" (Texas College and University System, 1983, p. 3). This is one of the few state statutes or policies that mentions the articulation officer. The strategy of creating such a position was given impetus by the Association Transfer Group following a national conference held at Airlie House, Virginia, in December 1973. The articulation officer would report to a senior administrator and be assisted in policy development by a standing committee including students, faculty, administrators, financial aid officers, registrars, admissions and records personnel, and student affairs staff members (Association Transfer Group, 1974, p. 3). A research study establishing guidelines for such a position was completed by Schafer (1974) who urged the appointment of an Officer for Articulation Counseling (OAC) in each institution. The OAC would serve primarily as an inter-institutional contact between the university and community colleges. The counseling aspects of the position were strongly emphasized.

The second notable change was the development of nontraditional modes, including national examinations taken in lieu of course enrollment, the negotiation of work taken at non-degree granting institutions such as the military, and the awarding of credit for experiential or prior learning (Texas College and University System, 1983, p. 3). The amount of credit extended for any of these modes is controlled by receiving institutions. Documents on recommended credit for work accomplished in the military, published by the American Council on Education, and on credit for life experiences,

published by the Educational Testing Service, are widely used. (See Chapter IV.)

The modified transfer core approach in Texas appears to offer, at least by definition if not in action, a degree of flexibility beyond a uniform basic core, thereby avoiding exact duplication among institutions. However, the Coordinating Board must watch for different interpretations of the lower division placement of community college courses by university departments and for major curricular changes suddenly announced by either party.

The Illinois Legally-Based Plan. Sections 102-111 of The Illinois Junior College Act of 1965 contain statements on articulation and transfer that reflect recommendations in the 1964 *Master Plan for Higher Education*; hence the title "legally-based" is assigned to the Illinois plan. Similar to Florida, the Illinois agreement gives preference to associate degree holders. Named the Baccalaureate Articulation Compact, the document was first proposed in the mid-1970s and is now in place after several years of postponement. The compact requires that associate degree graduates from the state's community colleges be accepted at public universities in upper-division standing and guarantees graduation after two more years of successful upper-division work in the same program (Illinois Community College Board, 1978, p. 3).

The State Community College Board has been instrumental in persuading public and private colleges and universities to appoint articulation coordinators with decision-making authority. The Illinois Board was the first state agency (after California) to do so; since then, transfer coordinators have met several times a year to review the status of articulation and transfer. *The Directory of Transfer Coordinators of Illinois Colleges and Universities* (1984) seems to be the only publication of its type.

Illinois has also taken leadership in resolving difficult subject-specific transfer problems that persist in many states. One of these, in business education, has recently been reviewed by the Illinois Board for Higher Education. A major difficulty that occurs nationwide arises from one of the curricular standards of the American Assembly of Collegiate Schools of Business (AACSB). According to AACSB policy, professional courses in business should be concentrated in the upper division, with only a limited amount in the lower division (AACSB, 1978, pp. 34-5). This obviously limits the participation of two-year colleges. As a recent Board of Higher Education report indicates, several Illinois institutions are trying to alleviate the adverse effects of the regulation. Universities now review com-

munity college course outlines and offer substitute course lists to make the credit transfer process more flexible. Although this review procedure may appear to be a step backward, it is actually a logical first step in tackling a difficult and persistent problem.

The Massachusetts Commonwealth Transfer Compact. The basis for the Commonwealth Transfer Compact is the acceptance of associate degree programs that contain the equivalent of 60 hours of undergraduate college-level study. Endorsed by all public higher education institutions by 1974-5, the Compact makes reference to associate degree acceptance as one small step toward a total agreement that would eventually include policies on the transfer of individual courses or packages prior to degree completion (Massachusetts State Board of Regents of Higher Education, 1984). Community colleges are allowed to determine their placement in the curricular areas of English, social science, mathematics, sciences, and the fine arts. For example, business mathematics could apply toward the mathematics requirement and speech could apply toward the humanities group.

A revised Compact completed in 1984 includes several changes. The new document provides for a Transfer Coordinating Committee, requires the appointment of a transfer officer at every institution, and recognizes the allocation of space for transfer students (Massachusetts State Board of Regents of Higher Education, 1984). The revision distinguishes between the A.A. and A.S. degrees; the latter places greater emphasis on scientific, mathematical and technical competencies. Model transfer programs in business administration and engineering have also been developed. Completion of the associate degree remains the fundamental requirement. However, variations from the stipulated academic programs leading to associate degrees are reviewed by the Transfer Coordinating Committee. A minimum 2.00 GPA at community colleges has been established. Program integration with distinctions between the two associate degrees and provisions for strengthening coordination, information dissemination, and transfer services at the campus level are advantages found in the revised Compact.

Rhode Island Policy for Articulation and Transfer. A document released by the Rhode Island Board of Regents for Higher Education (1980) represents the latest statewide effort to standardize articulation and transfer. Policies placed at the back of the document, *A Transfer Guide for Students*, provide for course and program transfer and call for articulation services.

Five sections of the *Transfer Guide* merit consideration. First, the transferability of credit is not affected by the vertical or horizontal movement of students. This reflects the increase of "reverse transfers" (those who transfer from four-year to two-year colleges) and "horizontal transfers" (those who transfer among community colleges or universities). Second, specific reference is made to the assessment of prior learning experiences. Institutions are required to state criteria for measuring and awarding such credit and are urged to consider credit earned through prior learning on the same basis as credit earned through traditional course work (Rhode Island Board of Regents for Higher Education, April 1980, p. 6). Third, a permanent interinstitutional committee has been established by the Postsecondary Education Executive Council, and each institution is instructed to designate an articulation/transfer officer. Fourth, students are assured due process after all avenues for solving grievances have been investigated. The articulation/transfer officer then becomes the pivotal person. Fifth, a uniform course numbering system has also been activated. Rhode Island thus appears to have achieved a reasonable balance between institutional responsibility and state coordination.

Summary, Formal and Legally-Based Plans. Agreements of the states classified under the formal and legally-based pattern have several common characteristics: (1) The breadth of general education acceptable for transfer. (2) The emphasis on completion of the associate degree prior to transfer. (3) The legal nature of the agreements, i.e., state law, state education code, or master plan policy. (4) The inclusion of articulation as well as transfer provisions.

State System Transfer Policies

About 20 states are placed in the second category, including several where university/community college systems dominate, i.e., Alaska, Hawaii, Kentucky, Nevada, and Wisconsin. Two others, Maryland and South Carolina, have only recently introduced statewide transfer policies. Developments in these two states and in a few others will be examined.

Maryland Transfer Policies. In 1980, a set of 12 transfer policies became effective in Maryland. Developed by the Segmental Advisory Committee Task Force and endorsed by the State Board for Higher Education, the Document supersedes the two-section broad policy statement announced in the 1973 master plan. Unlike many of the

earlier statewide agreements, the Maryland policy document recommends, but does not require, completion of the associate degree prior to transfer. The basic admissions policy is similar to that of the University of California and the California Community Colleges: a high school graduate attending a community college may enter the university, if originally admissible, during any quarter if he maintains a "C" average in university—parallel courses. Characteristic of new agreements, each public institution is required to name a person responsible for coordinating transfers. An appeal mechanism is also established (Maryland State Board for Higher Education, 1979, pp. 1 and 2).

A conservative reaction to transferring vocation-technical credits prevails, however. Exceptions to this policy will be discussed later.

The New Jersey Full-Faith-and-Credit Policy. The New Jersey Transfer plan adopted by the board of Higher Education in 1973 under the title "Full-Faith-and-Credit" guarantees county (community) college graduates admission to the state college system, but not necessarily to the first-choice college. This concept is also endorsed in the *1981 Statewide Plan for Higher Education*. In order to facilitate orderly programmatic transition, the general education requirements originally stipulated for the community colleges have been made the same as those offered by state colleges. An extension of the guarantee to include Rutgers University and the New Jersey Institute of Technology has been urged in a resolution passed by the State Board of Higher Education on March 18, 1983.

The guarantee policy stipulates that credits earned by graduates of approved transfer programs shall be accepted in entirety toward the general education requirement at the state college (New Jersey State Board of Higher Education, 1983, p. 2). The amendment brings the Full-Faith-and-Credit agreement in conformity with state college baccalaureate requirements. Though it does not preclude state colleges from adding work in general education, it does protect the integrity of the senior institutions. The general education policy also assures full credit for students who have earned A.A. and A.S. degrees in county (community) colleges.

Nongraduates of transfer programs are still technically eligible if sufficient credits have been earned to graduate, but a particular course requirement is lacking. Both graduates and nongraduates of nontransfer programs are entitled to enrollment in those state colleges that have programs not formally designated as approved for transfer. Such programs undoubtedly refer to occupational-type cur-

ricula that might be a state-college specialty.

In summary, the comparability of county (community) college and state college curricular requirements has been established, and senior universities have been urged to endorse the Full-Faith-and-Credit Agreement.

The Oklahoma State System Plan. The Oklahoma plan is based on a common general education core for the state's junior colleges. The core consists of a minimum of 33 hours (out of a 60-credit-hour associate degree curriculum) and is virtually the same as the Florida minimum program. The Oklahoma plan makes specific reference to the applicability of the student's remaining units, i.e. "any prerequisite courses necessary for his/her anticipated upper-division program" (Burson, 1979, p. 38). Although occupational education is not directly mentioned in the agreement, graduates of community college career programs are encouraged to include major courses to meet baccalaureate requirements. The Florida formula, however, specifically excludes vocational-technical courses from transfer credit.

Two sections of the Oklahoma document are unusual and possibly unique to state agreements. First, although senior institutions may require additional general education courses, these must be given in the upper division only, thus protecting transfers from hidden lower-division requirements. The second notable factor is a provision dealing with both the lower- and upper-division: "Courses classified as junior level yet open to sophomores at senior institutions, even though taught at a junior college as sophomore level courses, should be transferable as satisfying that part of the student's requirement in the content area" (Burson, 1979, p. 40). The fact that certain courses offered by junior colleges in Oklahoma are acceptable for upper-division credit on a statewide basis represents a unique policy for the two-year colleges. The provision provides a partial answer to a basic question: does the faculty of a two-year college have integrity in terms of the degree application of the courses offered? The answer is affirmative in Oklahoma.

Agreement on Transfer Policies in South Carolina. South Carolina is one of the few states that include relationships between technical institutes and state university campuses in transfer policies. Only academic courses, however, can be transferred from the technical institutes to the university. Authority for this beginning relationship was provided by the *Master Plan for Higher Education*. Developed by the Commission of Higher Education and released in December

1979, this document gives considerable attention to transfer policies. Guidelines emphasize the importance of voluntary interinstitutional cooperation. Responsibilities of both sending and receiving institutions are defined, and transfer credit is recommended for experiential learning and for courses given by noncollegiate and unaccredited schools (South Carolina Commission on Higher Education, 1979, p. 199). The document thus constitutes a major contribution to the literature on state planning.

The current transfer agreement centering on associate degree programs at the state's technical colleges was announced in April 1982. As a first step toward a general education core, courses with common syllabi are now being developed by the colleges. By Fall 1984, between 20 and 40 courses should be cleared by all senior institutions and placed on a state list of transferable credits (Committee on Academic Affairs, 1984, pp. 1 and 2). In addition, an agreement is now in place that includes general principles and supporting policies to guide the development of the core. Steady progress toward the eventual adoption of a core for the A.A. and A.S. degrees is continuing.

Associate Degree Guidelines in Washington. For more than a decade the state of Washington has had an interinstitutional committee on articulation and transfer called the Intercollege Relations Commission. Transfer guidelines have been released by the Commission since 1971 and have provided the basis for a number of course agreements. Only recently, however, has the University of Washington joined other senior institutions in support of the Commission guidelines. These specify that associate degree transfers satisfy the same University admission requirements as other new undergraduates, and that the transfers will be required to complete general baccalaureate courses that are exactly comparable to those expected of other Arts and Sciences undergraduates. The completed A.A. degree is to satisfy the new English proficiency requirements, and about 15 or the 60 distribution credits in the College of Arts and Sciences will have to be taken at the university (Intercollege Relations Commission of the State of Washington, 1983, p. 6). A statement included as a clarification has significant implications for future transfer relationships: "Associate degrees meeting the distribution system . . . represent but one model for valid general education programs. Two- and four-year colleges and universities are encouraged to develop models, including interdisciplinary core requirements or vertical general education requirements with courses at the upper-division level. Institutions using such alternative approaches are further encouraged to develop in-

dividual interinstitutional transfer agreements" (Intercollege Relations Commission of the State of Washington, 1983, p. 4).

The associate degree route is indeed only one model. It is, in fact, the simplest of the steps toward a total transfer package recognizing pre-degree transfer applicants.

University/Community College Systems

Of the several states in which community colleges are part of the university system, Kentucky and Nevada appear to be most active in promoting systemwide transfer policies.

The University of Kentucky System. Community colleges in Kentucky are comprehensive. Local advisory boards are appointed by the Governor, but the University Board of Regents is the controlling body, since these colleges are a part of the University of Kentucky.

In the last three or four years, emphasis has been given to transfer agreements focusing on vocational programs. Some agreements are statewide, involving state vocational-technical schools and the University Community College System; others are interinstitutional, involving institutions from the several levels of public education. The transfer of secretarial studies from schools to colleges was first negotiated in January 1979. Program-to-program linkages, interinstitutional arrangements, and systemwide agreements are also operating in various allied health disciplines. The most recent of these involves several hospital schools of radiologic technology. General education requirements included in some of the allied health agreements must be completed before transfer credit is awarded.

The University of Nevada System. Articulation and transfer policies for the University of Nevada System are written into the system code. An articulation board is the official evaluating body. Its decisions are subject only to the Chancellor and to the Board of Regents. Similar to other states in this group, controls are centralized in state government, specifically in the State University System.

The associate in arts degree is the primary transfer base. "Capstone programs" leading to specialized baccalaureates, such as the Bachelor of Applied Science, may be transferred on approval of the Chancellor and the Board. University campuses are specifically prohibited from requiring transfer students to take examinations for credit validation (University of Nevada Board of Regents, 1984, p. 6).

Two other sections in the code refer to articulation matters not ordinarily found in state transfer agreements: joint curriculum planning (section 10) and advising, counseling, and other services (section 13).

Like Florida, a common course numbering system is mandated. Letter designators indicating the transfer value of a course are stipulated. For example "a" designates community college and general education courses; "b" designates community services courses, and "d" designates community college equivalents of lower-division university courses. The "b" designator signifying non-transferable course work is the most controversial suffix. The point of the argument is that the nontransferable designation prejudices the possible acceptability of community services courses in other university systems.

Business education is the most difficult area. University colleges of business apparently agree with the American Assembly of Collegiate Schools of Business (AACSB) that most business courses should be offered in the upper division. (For a discussion of this argument, see Bonnell, 1982.)

Summary, University/Community College Systems. As the title implies, states supporting university/community college systems tend to concentrate on the processes of transfer, i.e., formulas for granting credits toward lower division and major requirements. Less mention is made of articulation services. While the level of control by state agencies or universities varies considerably, states in this category assert stronger and more direct control. However, these university/community college systems have recently shown greater flexibility. Two-year colleges in Kentucky and Nevada are now referred to as "community colleges," and greater attention appears to be given to coordinating curriculum planning and to the development of comprehensive transfer guides.

VOLUNTARY AGREEMENTS AMONG INSTITUTIONS.

States placed in this pattern employ informal processes, such as voluntary cooperation and negotiation, rather than legislative fiat. Subject matter and intersegmental liaison committees are the working groups. Maximum involvement of constituents and diversity of the negotiation process are strengths. Angular decision making (difficulty in translating committee decisions into action) and limited financing are continuing weaknesses. Only one of the several states approaching articulation and transfer responsibilities under these cir-

cumstances is discussed below.

The California State University Community College Agreement. The California State University System (CSU) allows greater flexibility in its transfer relationship with the state's community colleges than does the University of California. The latter continues to implement its longstanding "similar course" philosophy by carefully monitoring community college courses to determine their general transferability and the degree to which they satisfy specific graduation requirements.

An executive order (No. 167) issued by the State University System for implementation in Fall 1974, delegated to community colleges the responsibility for identifying baccalaureate courses and ensured that the 19 CSU institutions accept such courses as at least elective credit. Since admission of transfer students is based on grades in transfer courses, this policy established common admission standards throughout the system (California State Universities and Colleges, 1973, pp. 1-2). The Executive Order also established an intersegmental transfer credit review board for resolving disagreements over course designations. A recent evaluation, however, revealed inconsistencies among community colleges in their designation of baccalaureate-applicable courses and determined that some CSU procedures needed clarification. Overall, however, the concept appears to be sound and the policies initiated in the executive order are operating effectively (California State Universities and Colleges, 1981).

Another executive order (No. 342) issued April 1, 1982, authorized certification of CSU general education and breadth requirements that are completed in regionally-accredited institutions. Certification is held to 39 semester units accepted toward a baccalaureate, with minimums established for each of five general education areas. An examination procedure can be substituted. A panel of faculty from CSU and the community colleges acts as the petition review committee (California State Universities and Colleges, 1982, pp. 2, 3 and attachment B).

These policies substantially increase transfer flexibility. The initial executive order giving virtually unrestricted responsibility to the community colleges to name baccalaureate-appropriate courses is the most liberal of all statements on transfer. Criteria for naming baccalaureate appropriate courses need to be consistently monitored to maintain degree uniformity. As community colleges assume this responsibility, the effectiveness of the agreement is likely to gain national attention.

TRANSFER OF VOCATIONAL-TECHNICAL CREDITS

Until very recently, only those institutions emphasizing occupational and career education through the baccalaureate were accepting occupational credits in transfer. The current upswing in interest is largely due to the work of Bushnell (1978), whose U.S. Office of Education project, *Education and Training: A Guide to Inter-Institutional Cooperation*, identifies and describes successful transfer efforts and gives particular attention to building interinstitutional cooperation. His search for collaborative efforts yielded examples from a dozen states. Community college/area vocational school agreements were a common feature, along with administrative and programmatic shortcuts favoring vocational-technical transfers and the heavy use of community advisory groups. In addition to Bushnell's study, the efforts of the National Occupational Competency Testing Institute in the development of written and performance examinations are also important in speculating on the future of the transfer of vocational-technical education.

Current interest in this arena has many causes. Falling enrollments in academic programs and lean budgets are forcing the creation of diversified programs and flexible delivery systems that attract career-oriented students. Occupationally-oriented curricula continue to increase in senior institutions and there is a growing list of two-year courses offered on branch campuses (Campbell and Korim, 1979). Although these new programs expand opportunities, they slow and confuse articulation and transfer by challenging the territorial rights of community colleges and technical institutions. Greatest activity is occurring in the engineering technologies.

Many factors contribute to the difficulty of completing transfer pacts. The very nature of vocational-technical education presents a fundamental problem. What is vocational-technical education? What kinds of education should be offered under that rubric? How is vocational-technical education related to academic education? (What might be vocational for one student could be avocational for another.) What blend of these two components is desirable? How can academic quality be maintained in competency-based curricula? These questions require additional study.

Among the statewide efforts to facilitate vocational transfer are the "two-plus-two" cooperative programs in Oregon and Texas; Ohio, Michigan, and North Carolina have also made most impressive strides. Progress in Ohio is most apparent in the recently-established relationships between area vocational schools and the state's two-year institutes and colleges. The transfer arrangements at Cincinnati

Technical College are excellent examples. Credit acceptance policies have been completed with seven vocational school districts. Under a flexible plan, vocational school students have several optional routes for gaining advance standing credit for up to five courses. A two-year pilot program is underway. These efforts, like developments in Oregon, are interinstitutional.

The Advisory Commission on Articulation Between Secondary Education and Ohio Colleges, appointed in 1980 by the Board of Regents and the State Board of Education, was charged with the responsibility of developing college preparatory curricula that may curtail the need for remediation at the college level (Ohio Board of Regents, 1981, p. 1). Other states are in the process of following this lead. In California, for example, a statement on competencies in English and mathematics, expected for freshmen entering the two senior systems has just been adopted. Similar statements are emerging in other states.

In Michigan, the initial concentration on occupational program transfer between K-12 districts, area centers, and community colleges was mandated by the State Constitution (Michigan State Department of Education, 1975, p. 6). Following a regional orientation toward career education planning, community colleges entered the coordinated effort, and transfer agreements started to emerge in 1976 as a part of the comprehensive career education state plan. The 1975 document also recommended continuous occupational education programming between two- and four-year institutions. By 1979, eight baccalaureate colleges and universities had been given state funding to develop transfer agreements with 29 of the state's community colleges. Case studies provide policy and procedural information that might be important to state planners (Michigan State Department of Education, 1979, p. vii, pp. 1-85). A sample memorandum of understanding is printed on page 90 of the above-named document.

For at least a decade, the North Carolina Joint Committee on College Transfer Students has been working to systematize the transfer of credit from vocational and general education programs offered by the state's technical institutes. The Allied Health Articulation Project, for example, provided opportunities to combine the two types of curricula. Three basic patterns were projected in the initial study completed in 1974: preprofessional studies (e.g., physical therapy), basic professional curricula (e.g., dental hygiene), and intermediate professional curricula (e.g., medical record technician) (Boatman and Huther, 1973). Groups of courses were outlined for the lower- and upper-division years, placing general education at both levels, and valuable guidelines were suggested for student ser-

vices, admissions, grading, and institutional autonomy. While gaining senior college support was difficult, particularly for general education courses offered by technical institutes, the Joint Committee continues to call for dialogue on the key question: Why are college parallel general education courses offered by technical institutes not certified for transfer?

North Carolina was a strategic state for this important allied health project, because both community colleges and technical institutes could be involved, and because both kinds of two-year colleges offer technical degrees and certificates. Another unusual feature is the bachelor of technology degree offered at two senior institutions; this degree provides potential for programmatic exchanges between the two- and four-year schools. The allied health sections of the publication, *Guidelines for Transfer*, are indicative of the Project's success. Revised regularly by the Joint Committee on College Transfer Students and published by the University of North Carolina, they have been greatly expanded. The transfer guide is the most comprehensive of its type reporting institutional policy and procedures. Interinstitutional transfer agreements resulting from the allied health project now serve as models for the rest of the nation.

THE TRANSFER POTENTIAL OF UPPER-LEVEL UNIVERSITIES

When upper-level colleges and universities were established in the early 1970s, the transfer potential with community colleges (a two-plus-two configuration) was a compelling argument. Community college graduates, it was assumed, would more "normally" transfer to nearby upper-level institutions. Although this "natural" relationship has been only modestly successful, the concept deserves consideration. By definition, a dual responsibility exists for coordinating curricula and services for midstream students.

A recent study of upper-level institutions in the United States identified 25 such colleges and universities spread over 11 states. Over half are in Texas. Illinois is the only other state with more than one upper-level school (Bell, 1980 pp. 5-6). Only one offers the doctorate, (University of Texas, Dallas). The others receive most of their students from community colleges and deliver some graduates to doctorate-granting universities. This dual relationship burden is similar to that experienced by community colleges in their "middleman" relationship with secondary schools and universities. A middle position tends to confuse institutional identity as well as interinstitu-

tional associations².

When examining the transfer potential of upper-level institutions, a number of issues should be addressed: (1) standards of eligibility for admission (Is the associate degree adequate for admission to the upper-level university?); (2) transfer credit determination (Are vocational and adult education courses acceptable in lieu of an associate degree?); (3) resolution of individual deficiencies (Is precollege work transferable?); (4) appeals procedures (In states where appeals are not controlled by statewide agreements, what inter-institutional mechanism is appropriate and politically acceptable?); and (5) concurrent enrollments in community colleges and upper-level universities (for brief discussions, see Bell, 1980, p. 23).

Two examples of attempts to perfect two-plus-two relationships should be sufficient evidence. At Governors State University in northern Illinois, over 300 transfer arrangements have been developed with at least seven community colleges in addition to the Chicago City College system. These agreements guarantee transfer acceptance of all units in the associate degree packages, and assure opportunities to complete the baccalaureate degree in a normal 60 to 70 hour upper-division sequence (Governor's State University, 1982). As another example, the State University College of Technology at Utica/Rome, New York, recognizes four associate degrees and meshes these with three baccalaureate degrees, (the bachelor of arts, the bachelor of science, and the bachelor of professional studies). The bachelor of professional studies degree, for example, consists of a course distribution similar to the associate degree program, i.e., two-thirds professional/technical and one-third arts and sciences (Bell, 1980, p. 26; Kintzer, 1979, p. 39).

Examples of articulation relationships (services for transfers) can also be reported. At the University of Houston, Clear Lake City, Texas, an advisory council of university and community college representatives was formalized by state legislation (Bell, 1980, p. 24). The Council encourages joint articulation activities as well as cooperative academic programs. Poor academic transfer communication with community colleges is the most damaging of all shortcomings. As indicated in a study by the National Association of Student Personnel Administrators (NASPA), more emphasis should be given to academic programmatic transfer, and less attention to traditional student affairs articulation, such as financial aids, hous-

²The definitive statement on the history and development of the upper-level institution was written by Altman (1970).

ing, and extracurricular activities. (Huntington, Robertson, South, and Wury, 1976).

In general, however, the transfer mission of upper-level institutions has not reached expectations. As Cardozier recently reported, transfers from four-year colleges comprise nearly half of undergraduate admissions in some upper-level schools, and inappropriate preparation at community colleges may make it difficult for upper-level universities to maintain quality upper-division majors (Cardozier, 1984, p. 32). As a result, some upper-level schools have shown interest in adding lower-divisions—to become full baccalaureate-granting institutions. The most concerted effort occurred in Florida where the legislature authorized admission of freshmen to all four of the upper-division universities. There are none left in the state.

The upper-level university in the United States seems unlikely to survive even in states that have strong two-year college systems with well developed articulation/transfer policies. These institutions apparently cannot resist the temptation to become traditional universities as a result of political interferences from outside and the attitudes of faculty on the inside.

SUMMARY

In the last 15 years, the number of states formulating articulation and/or transfer policies has not increased substantially. Among those joining the original group are Maryland, Rhode Island, and South Carolina. At least half of the 50 states continue transfer negotiations interinstitutionally, most on a case-by-case basis. The small size of the transfer cadre as well as the number of institutions in particular states are major justifications for such individual action.

The three classifications of current agreements are formal and legally based policies, state system transfer policies, and voluntary agreements among institutions. Formal and legally-based policies containing both articulation and transfer policies use statutes and/or regulations as a base for policy development. All states having such policies focus on either completion of a general education core and/or an associate degree package. Only a few develop policies relating to the acceptance of transfer credits for those not completing an associate degree, inferring that such applications will be treated as individual cases.

Total credits provided by community colleges and technical institutes continue to be limited to approximately one-half of those

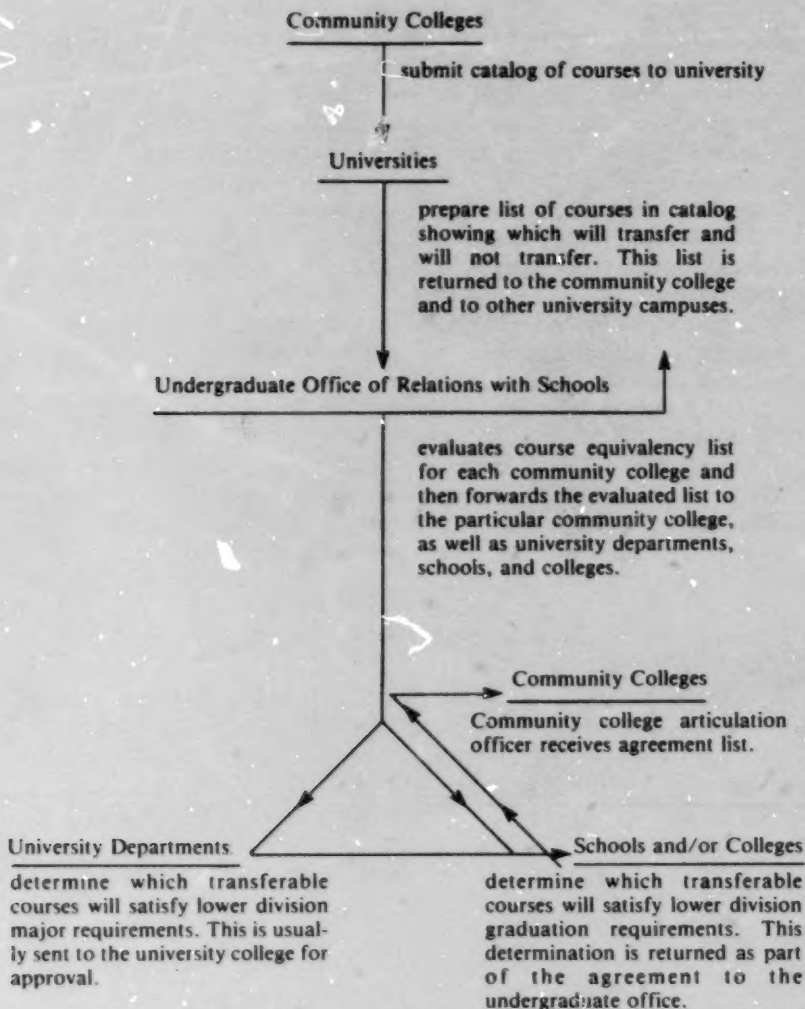
required for the baccalaureate and, with at least one exception (Oklahoma), are limited rigidly to the lower-division. This limitation, universally applied, is mandated by state legislation or education code, or by state master plans for higher education. The minimum transfer GPA remains at 2.0. Advanced standing for informal and nonformal educational experiences not sponsored by the senior institution is slowly gaining ground, primarily through the efforts of the Coalition for Alternatives in Post-Secondary Education (CAPE). However, statewide policies on credit exchange between traditional colleges and non-educational organizations now operating their own colleges (with both technical and general components) are virtually nonexistent. Both private and semiprivate coalitions, described in Chapter IV, are taking the initiative instead of state government.

State system transfer policies are often enforced by a state agency assigned that specific responsibility. The authority of state government makes these policies operable and enforceable; needed changes can be made through the regular administrative channels of the established bureaucracy. In a few states the community colleges and the universities operate under the same governing board, and policies are administratively enforced by those directly responsible to the board.

The voluntary agreement category provides a number of different individualized approaches; some organized but many unorganized. Even though a state policy is available, it affirms the individualized nature of arriving at agreements.

The following two models should be useful to state organizations attempting to develop articulation and transfer agreements. The first, a guide to course transfer, is more appropriate for states placed in the second category, *state system transfer policies*. As depicted in Figure 1, the processes are initiated by two-year colleges and completed by the university departments and colleges that determine transferable courses applicable to lower-division major requirements and lower-division graduation requirements.

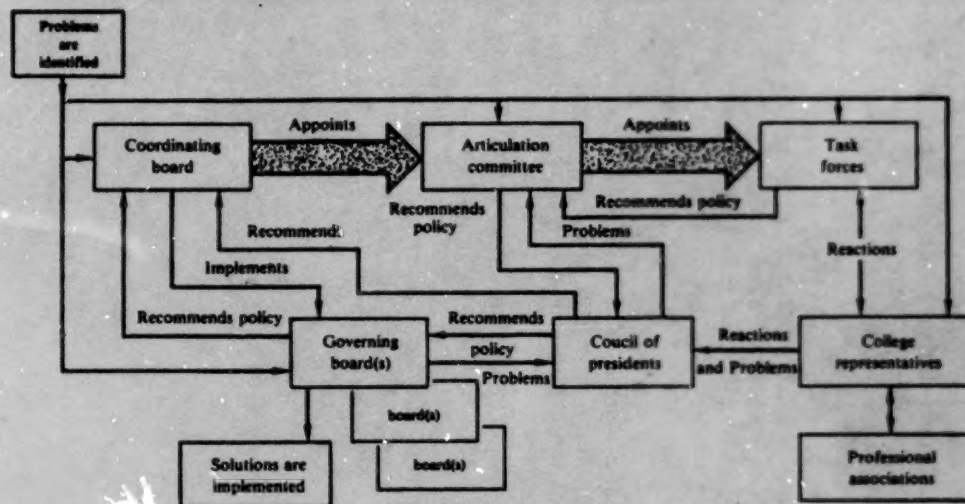
Figure 1
GUIDE TO COURSE TRANSFER



The second chart, presented below as Figure 2, directs attention to a state-enforced system. Entitled "Guide for Developing Solutions to the Statewide Articulation and Transfer Problems," this model depicts the legal structure, communication patterns, and a mechanism for student problem appeal. Developed by Wattenbarger and now redefined for this publication, the mode is most appropriate for Pattern I states, as well as for those systems emphasizing voluntary articulation and transfer relationships. The Wattenbarger model also includes references to professional associations such as accrediting agencies and the American Association of Collegiate Registrars and Admissions Officers (AACRAO). The regional accrediting agencies have only recently shown interest in articulation and transfer by adding citations to their self-evaluation guides. AACRAO continues to be a strong influence in many states, especially those maintaining interinstitutional agreements, *vis a vis* state-mandated policies. The AACRAO publication, *Report of Credit Given*, a summary of transfer credit recommendations reviewed annually, is the fundamental resource in Colorado, Michigan, and Wisconsin.

Articulation must be recognized as a series of processes, transfer being one of them. The total activity—the relationship—is also an attitude. No matter how beautiful the paper model, success of the responsibility to serve transfer students is strongly dependent on the support and understanding of faculty and staff of both sending and receiving institutions. The problem is largely people-oriented.

Figure 2
GUIDE FOR DEVELOPING SOLUTIONS TO THE
STATEWIDE ARTICULATION AND TRANSFER PROBLEMS



CHAPTER III

THE INTERNATIONAL SCENE: SIGNIFICANT DEVELOPMENTS

In nations on several continents, formal and informal credit transfer arrangements are now beginning to supplement traditional entrance examinations as a route to advanced or higher education. Formal arrangements are actually honored in few situations. While exceedingly difficult to acquire, there is some evidence to verify progress, however limited, in providing alternatives to the time-honored qualifying examination for university admission.

Development of "short-cycle" systems or single institutions (i.e., postcompulsory vocational/technical institutes and preuniversity colleges) has clearly prompted attention to the need for greater flexibility in credit exchange and for stronger linkages in general between and among postcompulsory colleges and universities. Documentation will be offered that indicates education completed in technical institutes or colleges now qualifies short-cycle graduates for positions in government and industry, as well as for the privilege of taking the state or national examination for job qualification. "Prepping" for the university in a postcompulsory school is also gaining popularity and recognition in a limited number of countries.

Outside the United States and Canada, where short-cycle systems in the western provinces closely resemble U.S. community colleges, transfer arrangements are developing in the British Commonwealth of Nations. Particular reference will be made to the upper-level university system in Quebec that is served by the CEGEPs, and to England where in recent years, credit exchange has been significantly broadened. Transfer developments in Scandinavian countries, particularly Norway and Sweden, will be reviewed, along with recent developments in Ireland. Scattered efforts are recorded in Australia and New Zealand among and between institutions, but these arrangements are not broadly applied.

Outside the United States, articulation services are not widely provided. With few exceptions, short-cycle colleges are not conceived as transfer (academic) institutions. However, a new counseling/information service developing in Britain will be discussed, and the

emerging integrated system of higher education in Norway will be described in some detail.

THE CEGEP SYSTEM IN QUEBEC

A transfer relationship in its most direct form is found in Quebec, Canada. In Quebec, graduation from a CEGEP (College d'Enseignement General et Professionel) is the mandated route to a provincial university. Since Quebec universities are upper-level graduate institutions, admission is granted only after successful completion of a two-year CEGEP diploma. Like American community colleges, the CEGEPs are comprehensive, offering adult and continuing education in addition to two-year academic curricula and three-year vocational/technical terminal courses. Under a highly controlled provincial pattern, the colleges are required to standardize their curricula, since the provincial government provides the financing. Complex regulations and norms have exacted controls over admission, support staff, and student/teacher ratios.

A core curriculum of 12 courses in the areas of literature, philosophy, humanities and physical education is required of all CEGEP students. Because these must be completed first, transfer within a particular discipline or between an academic and a vocational/technical course is usually accomplished without credit or time loss. Additional general courses are required for university transfer. Spread over six areas (health sciences, pure and applied sciences, human sciences, administration sciences, arts, and letters) the actual classes vary among the 45 colleges (Whitelaw, 1978).

Although currently operating under critical financial constraints exacerbated by increasing demands for continuing education and more sophisticated technological training, the CEGEPs continue to supply universities with well-qualified upper-division students.

OTHER CANADIAN PROVINCES

Transfer policies in Alberta and British Columbia are similar to those in American states. In Alberta, a transfer guide is published annually by the provincial Council on Admissions and Transfer. The guide contains regulations for public institutions receiving credits as well as nonuniversity institutional policies, program guides of public sending institutions in the nonuniversity sector, and policies for private colleges that send students to the provincial universities. Four arrangements are recognized by the Alberta Council: (1) programs of-

ferred in the nonuniversity sector equivalent to university work; (2) diploma, certificate, and other special programs given by nonuniversity institutions, (3) special interinstitutional arrangements; and (4) individual assessment on an *ad hoc* basis.

In British Columbia, the transfer guides of the three major universities — University of British Columbia, Simon Fraser University, and University of Victoria — carry detailed explanations of the applicability of credit. Three types of credit can be identified that are similar to credit classifications in United States: (1) credit assigned from a course equivalency, (2) unassigned credit acceptable in fulfilling subject requirement, and (3) general elective credit (Simon Fraser University, 1980, p. 5). One guide presents credit information in the form of three case studies of individual students (University of Victoria, 1980-81, p. 3). This information, often neglected in American interinstitutional policies, is worthy of consideration. Transfer students should be told how credits are assigned no matter what complications may arise for registrars.

Ontario maintains a two-track system of higher education unlike British Columbia and Quebec. Colleges of Applied Arts and Technology (CAATs) offer two- and three-year vocational diploma courses to grade 12 graduates, and the provincial universities provide traditional degree curricula primarily for grade 13 graduates. The CAAT system provides career-oriented institutions primarily for secondary school graduates who do not qualify for the university.

Attention is currently being given to cooperative programming between the universities and CAATs in order to ease the decline of secondary school enrollments. Students enroll concurrently in both institutions, working toward both a university degree and a college diploma. University graduates enrolling in colleges for a more practical diploma can get advanced standing credit for completed university work. In 1979, 2.4 percent of all new university entrants transferred from the CAAT system, and 6.8 percent of college students were former university students (Swirsky, 1981, Table 10). While the numbers are not large, this cooperative exchange increases the range of transfer options now available throughout the province. Guidelines established by the Ontario Universities Council of Admissions recommend that students not having completed grade 13 or the equivalent be considered for university matriculation after completing a two-year CAAT diploma (Ontario Universities Council on Admissions, 1980, p. 6). The grade average is also an admissions criterion.

FURTHER AND HIGHER EDUCATION RELATIONSHIPS IN THE UNITED KINGDOM

Credit transfer between the various institutions, sectors, and levels of further and higher education in the United Kingdom is more deviant than the Quebec system, but nevertheless takes place in two familiar transfer stages: (1) qualifying for initial entry or (2) qualifying for advanced standing. Both are facilitated in arrangements that specify the amount of transferable cumulative credit allowable, or through individual interinstitutional arrangements.

In Britain, an applicant who passes the approved national examinations is not automatically admitted to a university. Two sets of requirements are imposed: the *General Requirement* (or minimum qualification of courses passed at the ordinary and advanced level of the GCE) and the *Course Requirement* (or evidence of achievement in courses relevant to the major). All universities have established routes for candidates who do not qualify under either of the above requirements. Much of the transfer activity involves the Open University; reciprocal credit agreements are being negotiated between the Open University and other universities, and with the Council for National Academic Awards (CNAA), a chartered agency authorized to award degrees. The arrangement involving seven universities and the Open University shown below (Table 1) identifies Open University Foundation course credits considered as qualification for initial entry into each university on a direct transferability basis.

Table 1

**RECOGNITION OF OPEN UNIVERSITY CREDITS BY THE
SEVEN UNIVERSITIES UNDER RECIPROCAL TRANSFER
ARRANGEMENTS WITH THE OPEN UNIVERSITY,
AS AT FEBRUARY 1979**

University	Credits required for admission to first year	Credits required for admission to second year	Admission beyond beginning of second year
Essex	1 Foundation Course credit	At least 2 for a BA At least 3 for a BSc	Not normally possible but candidates with a BA degree (6 credits) may be considered
Heriot-Watt	Not specified in the agreement	At least 2 including 1 at second level	Not fewer than 4
Kent	Not specified but likely to be 1 Foundation course credit	2 or more	More than 3
Lancaster	1 Foundation Course credit	3 or more, including at least 1 at second level	Possible, though not quantified
St. Andrews	Not specified in the agreement	At least 2 including 1 at second level	Not fewer than 4
Salford	1 Foundation Course credit	3	Not yet possible
Sussex	1½ credits	3	More than 3

Source: Open University, *Recognition Information No. 2*, February 1979.

The CNAA validates transfer of Open University students to first-degree baccalaureate courses. Those with two or more Open University credits are eligible for transfer into the second year of the degree programs. Also valid is advanced standing transfer into the two advanced further education diploma programs offered by the Business Education Council (BEC) and Technician Education Council (TEC).

The Open University has granted credit exemptions since its establishment in 1969. However, these exemptions are granted only on the completion of written examinations externally moderated. There are no exemptions from specific university degree requirements. The beginning of modular-type diploma and degree programs with credit ratings for each module is broadening the variety of basic transfer levels, adding two new ones: initial admissions exemptions and advanced standing credit.

While the number of students admitted to universities via alternative routes is not large by U.S. standards, that group is reported to be steadily increasing. Although consecutive year figures are not available, Table 2 shows new entrants and transfers to United Kingdom universities for 1977-78.

Table 2

**NEW ENTRANTS AND TRANSFERS TO UK UNIVERSITIES –
FIRST DEGREE AND DIPLOMA COURSES, BY YEAR OF
COURSE ENTERED, 1977-78 SESSION**

Year of Course	Number of Students Admitted
First year	77461
Second year	2644
Third year	1022
Fourth year	312
Other	23
In-course transfers and secondments	1360
Total new entrants and transfers	82822

Source: Department of Education and Science, 1978b

Out of a total of 81,462 new entrants in 1977-78, 4,001 were admitted to universities with advanced standing. Two-thirds of those were admitted directly into the second year; 1,360 either transferred from one university to another without time loss or moved to another university where a particular course of choice was available. (This is the meaning of "secondments" in Table 2.)

Awarding advanced standing credit is apparently less widely practiced than granting initial entry into advanced courses. Such credit is seldom awarded for nonadvanced courses that are widely offered by Colleges of Further Education (the rough equivalent of American community colleges). However, advanced standing credit was granted to about six percent of those admitted to universities and polytechnics in England, and 50 percent were admitted to the Open University (Department of Education and Science, 1979, pp. 18-19). Another example of awarding advanced standing credit through completion of course modules is the General and National Level Certificates and Diplomas of the BEC (Business Education Council). Such transfer is possible where the course content in two institutions is similar. Modular-based transfer is only possible following completion of the entire unit of work.

As mentioned earlier, the establishment of the Open University in 1969 created the initial momentum to credit exchange. Alternate routes to higher education previously outlined were offered to thousands of adults. In the early 1970s, a matriculation policy enabling every citizen of the United Kingdom over 21, regardless of education or academic record, to take pre-degree or degree courses (both nonadvanced and advanced) opened the gates to requests for advanced credit. Similar experience resulted from the open-entry matriculation system for nonadvanced courses in the Colleges of Further Education.

Several reports document the continued build-up of interest. *The Russell Report* (1973) asked several prestigious organizations — the Committee of Vice Chancellors and Principals (CVCP) and the Council for National Academic Awards (CNAA) — to consider a credit transfer plan. Another paper, issued in 1978 by the Department of Education and Science (DES), underscored the need for material on recurrent education (Department of Education and Science, 1978a). The release of the Toyne Report in May 1979 climaxed the effort to systematize course and credit transfer. Authored by Peter Toyne, the Senior Lecturer in Geography at the University of Exeter, the report stressed the feasibility of creating a national information transfer service and argued for the establishment of an independent, nonprofit organization to sponsor the ser-

vice. The service would be introduced and tested in a two-year pilot program. A specialized center within the European System of Education Policy Information Centers (EPIC) was favored (Department of Education and Science, 1979, pp. V, 1).

Recent communication with Peter Toyne (Toyne, 1984) indicates that an information service has now been established in Southwestern England. Called Educational Counseling and Credit Transfer Information Service (ECCTIS), this pilot project provides a comprehensive source of information on courses offered by Colleges of Further and Higher Education. The data base already includes the course title, duration, mode of study, entrance requirements, and diplomas or certificates granted on completion. The system is beginning to be used by school-leavers, guidance specialists, further education admission and advisory staffs, educational guidance services for adults, career service specialists, public libraries, training officers, job centers, and professional bodies (ECCTIS, 1984, pp. 1-2). Microfiche packets covering first degree and advanced courses will soon be available. While initially funded by the Department of Education and Science and developed by the Open University, ECCTIS is intended to operate as an independent self-financing body. The service should expand nationwide by the end of 1985.

SCANDINAVIA

Norway. Course and credit transfer in Norway was first given impetus in 1969 with the creation of district (now called regional) colleges. These short-cycle institutions (some 13 scattered over the 18 regions) added flexibility and diversity to traditional higher education. The system of local colleges was also intended to relieve the university of some lower-division teaching, though this direction was never heavily pursued. At most, only about 30 percent of the students took parallel courses. In 1979-80 at BO/(Telemark District College), only 50 of over 300 full-time students anticipated university careers. Of those actually transferring from a district college to a university campus, the nationwide average remained between 20 and 25 percent (Hanisch, 1981 p. 18).

Regional integration of higher education is improving interinstitutional transfer. Campuses of the national university involved in the regionalization movement are shifting course transfer criteria from "sameness" to a more flexible stance of "similarity" or

"equivalence." Efforts of the colleges to act as resource centers for their regions by engaging in applied research on environmental problems help convince the university system that the regional colleges are legitimate research partners. This recognition is beginning to result in positive transfer relationships. However, two-year regional college studies are still given one-and-a-half years of university credit. In addition, complications caused by the interdisciplinary nature of many college courses continue to slow the transfer into traditional discipline-oriented university curricula.¹

The regionalization movement appears to be developing rapidly. Full integration of the various schools and organizations in many of the regions is anticipated to be completed by 1986 (Hanisch, 1984, p. 1). Institutions involved in the process include the regional colleges, technical and teacher training colleges, maritime and health sector colleges, and the district music conservatories.

Cooperative degree granting is another benefit emerging from regionalization. Participating colleges are free to grant baccalaureate degrees (called the second degree level) after four years of study at one or more of the institutions and the regional university campus. The degrees are issued by the colleges for the combined college/university program of study. Because 70 percent of the college graduates are finding employment after attaining the two- to three-year "Hogskolekandidat" degree, the college baccalaureate degree classes are small (Hanisch, 1984).

The relationship between the regional baccalaureate degree awarded for joint study by the colleges and the university-sponsored master's degree is a remaining complication. Work taken for a regional college baccalaureate is considered by the university to be only three-quarters of a degree (that is, 1.75 years of study instead of two). Confusion occurs as a result of this discrepancy when the college baccalaureate graduates apply for a university master's degree. The graduates are eligible by virtue of the baccalaureate, but not according to university standards.

The regionally integrated systems have now almost reached parity with the university system in total enrollments. This situation, plus the development of joint bachelor's - level programs with universities, is improving transfer exchange (Hanisch, 1984, p. 2).

Sweden. In Sweden, the upper-secondary schools are developing transfer linkages with the comprehensive regional universities. While

¹For a detailed discussion of "Interdisciplinarity" refer to *Interdisciplinarity in Higher Education* (UNESCO, 1983).

considered secondary, these institutions are not compulsory. Compulsory school-leavers, however, are encouraged to continue either in three-year programs with a theoretical orientation or two-year vocational courses. One-third of the places in the upper-secondary three-year programs are apparently saved for direct transfer into the university system. Choices of classes and admission regulations at receiving universities are critical transfer considerations (Ekholm, 1983, pp. 13, 16).

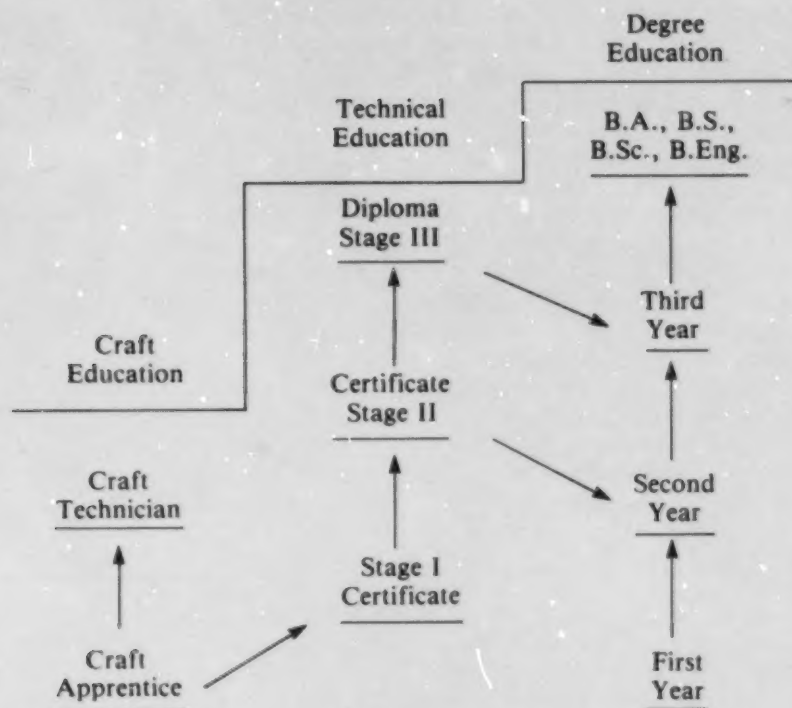
IRELAND

The regional technical college (RTC) movement in Ireland, a striking example of the extension of the college/technical institute idea, was created in the same year as the Norwegian system — 1969. Now established in nine communities, the Irish colleges provide “curricular bridges” in some applied/technical fields to senior institutions. These emerging arrangements first appeared with the two National Institutes of Higher Education (at Limerick and Dublin). Transfer is closest to reality where regional occupational or semiprofessional-type programs are shared by a college and an institute or university campus. Transfer is most difficult in the professions that are controlled by the university system.

The Transfer and Ladder Diagram (Figure 1) depicts the ladder system that is now slowly developing to provide opportunities for lateral and vertical movement through the postcompulsory system. Students should be able to move from a craft apprenticeship course to a first-stage technical program within the college system, then go to the institutes and, to a lesser extent, to the universities. The course and credit exchange is not large. According to a 1979 survey conducted by the National Council for Educational Awards, 583 RTC students transferred to other institutions: 305 to other regional colleges and only 12 to universities (Irish Press, 1980). This vertical transfer is being carefully monitored. The more ambitious RTCs have been warned not to overextend the university-prep mission; they are encouraged, instead, to expand horizontal movement.

Figure 1
THE TRANSFER AND LADDER DIAGRAM

This Transfer diagram illustrates the flexible ladder/transfer system which is currently being designed from the "Alternative System" of Higher Technological Education Colleges.



Source: Kintzer, 1981, p. 57.

Some of the colleges, particularly those in isolated areas or those located at some distance from degree-granting institutions, are under heavy community pressure to become more like universities. Some well-meaning citizens think that to emphasize degree programs and prestigious professional diplomas would enhance the reputation of their RTC. While the search for nobility is understandable, colleges headed in that direction are likely to weaken their primary role of expanding opportunities for postcompulsory education. The present position of the government on this point is indeed well taken.

SIGNIFICANCE

The discussion of the international scene focused on the contributions of several countries toward improving articulation and transfer: *The CEGEP/University relationship in Quebec, guidelines in other Canadian provinces, the new counseling and information service in Britain and transfer relationships initiated by Open University, the regional integration system in Norway, and the emerging "curricular bridges" provided by regional technical colleges in Ireland.*

Of these several efforts, The Norwegian regional integration system is least recognized in the United States. Although some interest appears occasionally in the literature, regionalization/integration of higher education on a scale found in Norway has not been attempted. Groups of institutions have initiated cooperative arrangements for particular purposes (e.g., recruitment, evaluation, computer consortia) but not on broad intersegmental bases. Joint degree programs intersegmentally planned, transfer of interdisciplinary curricula, and other aspects of "interdisciplinarity" as emerging in Norway all offer potential advantages for improving articulation and transfer in this country. A fully integrated system of higher education should, in our judgement, be carefully considered.

With the continuing diversification of higher education throughout the world, relationships between so-called short-cycle and long-cycle institutions become infinitely more complex. Differences between them are increasingly blurred. Academic drift is recognizable in both directions. For reasons not always educationally sound, universities assume short-cycle responsibilities (short courses perhaps in mid-management and adult education), and short-cycle institutions adopt university qualities (more emphasis on research and less on practical application). While transfer does occur regionally, agreements that are national in scope simply do not exist.

The major obstacle to university acceptance of credits from short-cycle institutions is the alleged inferior course quality and questionable competence of the instructional staff. As short-cycle colleges shift from academic studies—their heritage in the United States — the question of quality is likely to intensify. Too frequently, their general reputation suffers as more attention is given to less noble responsibilities such as vocational education and adult continuing education, however vital these are to society.

CHAPTER IV

HARBINGERS OF THE FUTURE

References were made in earlier chapters to an upsurge of interest in articulation and transfer, including comprehensive studies generated by the California Postsecondary Education Commission, formulation of statewide policy in several "new" states, and single institutional efforts to improve information exchange and other articulation services. In this chapter, several other developments will be briefly reviewed: the shift in attention from "The Regulars" to "The New Clientele;" transfer relationships with business/industry, proprietary schools, and the military; and major projects undertaken to promote the study of articulation and transfer. Particular attention will initially be given to legal encouragements and constraints resulting from the rapid increase of state statutes and state policy decisions.

LEGAL ENCOURAGEMENTS AND CONSTRAINTS

As has happened in many other educational processes and procedures, state legislatures have become more and more involved in internal institutional operations by requiring transfer rather than merely encouraging it. The most recent statutes in several states have (1) enacted articulation transfer agreements into statutory law; (2) required coordinating bodies to develop specific policies on statewide transfer agreements; (3) required educational institutions to establish cooperative agreements with business and industry; and (4) authorized community colleges to enroll high school students prior to their graduation from high school. These specific statutes follow previous instances when legislatures have been known to specify grade levels that must be accepted in transfer and to enact similar provisions designed to encourage (and even require) colleges to accept work from other institutions. The legislative intent to help students solve their credit problems is very clear.

Most educators view with horror such "outside" interferences, and the net result is that agreements are often developed under the gun of legislative fiat. There have been enough examples of

this type of pressure to cause educators in all states to recognize that "it could happen here too!" Such legislation may not always be well conceived and often causes detrimental problems that harm student progress as well as help it. It may be written by inexperienced staff who should, but do not, check on the potential effects and/or the potential problems created by new legislation.

SHIFT IN ATTENTION FROM "THE REGULARS" TO "THE NEW CLIENTELE"

Pressure from "The New Clientele"—predominantly part-time, nonresident adults—has had the effect of changing the priorities of traditional institutions and encouraging credit exchanges for experiential or prior learning and for external degree programs. Institutions catering the "The New Clientele" normally grant degree or certificate credit for prior experiences. However, such credit is seldom accepted for transfer by traditional universities.

A statement initiated by the American Council on Education's Office on Educational Credit and Credentials urges institutions to develop policies and supporting procedures for granting prior learning credit. Recommendation 10 concludes with a reminder to agencies engaged in establishing equivalencies for experiential learning that they have an obligation to involve academicians from postsecondary education institutions in evaluation activities, in the development of assessment instruments, and in the establishment of policy. Faculties are likewise obligated to be informed about policies and procedures that national agencies use for establishing credit equivalencies and also to assure themselves that the national assessment instruments they use in exercising the credentialing functions are valid and reliable (Miller and Mills, 1978, p. 236).

The logic of developing policy *before* announcing acceptance of transfer credits is difficult to challenge, yet this routine is often reversed. A check of a number of institutional publications indicates that most colleges and universities, even those specializing in experiential learning, generally do not recognize acceptance of such credit for advanced standing and sidestep the policy/procedure question by referring to individualized case-by-case decisions or by quoting a residency requirement. In these situations, the transfer applicant has no assurance unless the transfer acceptance is in writing.

In the last decade, external degree programs have proliferated in the postsecondary education community. Characterized by a minimum of classroom-earned credit and, in some situations, credit

for documentable prior learning, these programs are now offered by individual institutions as well as entire state systems. Colleges and universities without formal campuses and full-time faculties are now offering courses and whole curricula wherever there is an expressed need. Like the clientele they serve, the institutions have become mobile.

It is now quite common for established schools to develop on-campus units within the regular degree design (e.g., Columbia University's School of General Studies) or to create new degrees (e.g., the Independent Studies Adult Degree Program of the University of South Florida). Of the statewide systems, the Regents External Baccalaureate offered by the State University of New York is the best known and most significant. The system has a number of regionally-accredited campuses, and throughout the organization credit is awarded for correspondence, proficiency examinations, military service school classes, or special assessment of knowledge gained from experience, independent study, and other nontraditional approaches to credit giving. Other states, including New Jersey and Connecticut, have less extensive external programs. In Connecticut, associate degrees are now offered by the Board of State Academic Awards.

Credit transfer between the external degree schools and traditional universities is, at best, problematic. Usability of the external credits is the basic question. The transfer applicant asks: "Will my first-year credits earned through nontraditional study be acceptable for advanced standing at the state university?" While the answer is necessarily and desirably an institutional matter, units earned in external degree work, particularly those authorized by examination or from experiential equivalents, are still less likely to be accepted. The "similar" or "comparable" course concept continues to be favored by the Establishment. Cautious interpretation of these terms may well be a precaution against unorthodox grading and nontraditional programming. Professors continue to have prime responsibility for transfer acceptability of major field courses. Their decisions on transfer are indeed conservative.

Students enrolled in external degree programs have responsibilities when they seek to transfer credits. Persistence is an appropriate activity: initiating inquiries concerning applications, making sure that records of previous work and experience are on file, obtaining and reading available documents prepared by both sending and receiving institutions, and finding out where to go for answers.

TRANSFER RELATIONSHIPS BETWEEN BUSINESS/INDUSTRY, PROPRIETARY SCHOOLS, THE MILITARY, AND HIGHER EDUCATION

Alliances with Business/Industry. A formidable array of educational courses is now provided by business and industry, labor unions, professional organizations, government, and municipal agencies. Between 30 and 40 million Americans are involved, and perhaps a majority are enrolled in what is advertised as college-level (but non-credit) work. Linkages developing between business/industry and higher education (such as jointly-sponsored degrees, cooperative research, and short-course training programs) are logical outgrowths of the concept of lifelong learning that recognizes the need for a diversity of services provided by a variety of organizations.

The Directory of Campus-Business Linkages published in April 1983 by ACE/Macmillan, describes 290 jointly-sponsored programs and activities between higher education and business/industry. At least 70 of the 290 linkages refer to college-level work, certificate preparation or renewal, or degree preparation or continuation. Several types of specific transfer agreements are repeated in the 70 linkages: *transfer leading to the BA* (Minnesota Mining and Manufacturing with Lakewood Community College), *on-site credit* (Northwest Utilities with the University of Hartford), and *liberal arts or general studies offered at work sites or on campuses* (City of Milwaukee with Alverno College).

Despite growing interest in higher education/business collaboration, credits resulting from these individual linkages are still not broadly applicable. In addition, credits earned in courses sponsored entirely by industry are not likely to count toward a university degree unless the program is approved by one of the regional accrediting associations. Accrediting agencies play a pivotal role, and pressure to liberalize their policies is increasing.

Alliances with Proprietary Schools. Particularly significant in the general upsurge of education provided by "outsiders" is the competition generated between community colleges and proprietary institutions for students, as well as the debate over the quality of career programs provided by the latter institutions. According to the National Center for Education Statistics, the number of trade and industrial schools increased 36.4 percent from 1974 to 1978 (Kay, 1980). In California alone, there are more than 2600 private postsecondary institutions with a total enrollment of almost 500,000 students (Peterson, 1982, p. 56). Recent research on the success of the two sectors in

meeting the demands of the job marketplace, particularly the studies of Wellford Wilms (see, e.g., Wilms, 1982), has favored proprietary institutions, thus intensifying the rivalry. While some articulation agreements have been formalized between community colleges and proprietary schools, these exchanges are still few, and the relationship remains strained.

A major breakthrough has recently been accomplished in Maryland with the announcement of a transfer policy between independent postsecondary schools (formerly called proprietary schools in Maryland) and community colleges. Endorsed by the State Board for Community Colleges and approved by the State Board for Higher Education, the statement includes guidelines for developing such agreements. The quality of proprietary school courses is to be carefully monitored. Course comparability must be assured before credits are granted. Evaluation guidelines of the school courses are detailed. Community college judgments are to focus on course outlines, textbooks, facilities, contact hours, test procedures, grading, and the faculty. The proprietary schools must be approved by the State Board for Higher Education or by a listed national professional accrediting agency. Community college credit is to be granted only for courses in which students earn at least "C" grades. Parties involved in the agreement must communicate curricular changes (Maryland State Board for Higher Education, 1983).

A proposal is now being discussed regarding the feasibility of developing articulation/transfer agreements between a targeted group of five proprietary institutions in the Baltimore area and the Community College of Baltimore. Students attending a proprietary (postsecondary specialized) institution would earn credits toward associate degrees.

Alliances with the Military. Military service personnel entering the transfer stream bring needs that require special arrangements. Thousands are earning college credits through such programs as the Servicemembers Opportunity College, Community College of the Air Force, the Army's AHEAD Project, the Navy's Afloat College Education Program, and DANTES (Defense Activity for Non-Traditional Education Support).

The Servicemembers Opportunity College (SOC) is the largest and most comprehensive effort to serve military personnel who cannot participate regularly in campus-bound, in-residence degree programs. Under the SOC system, two-year colleges meeting a series of 10 criteria are designated as "opportunity colleges." A special catalog has been developed and counselors are trained to

enroll service personnel in member institutions near military bases. The "contract for degree" option (offering courses but not necessarily degrees) has now spread to some 500 universities, colleges, community colleges, and technical institutes. Member institutions agree on course comparability, allowing military personnel to earn college credits at one college, and assuring transfer to other member institutions.

The latest SOC project is an associate degree program (SOCAD) built on military occupational specialties. Fifty institutions and the Department of the Army are involved, including 31 community colleges and 19 senior colleges and universities in 20 states. Courses, largely technical or occupational in nature, are offered at some 370 Army Education Centers worldwide and at member institutions. Students are evaluated by their "home" colleges, and are given an SOCAD agreement indicating remaining associate degree requirements that can be completed at any SOCAD location. Transfer is thereby guaranteed (Pratt and Karasik, 1984, pp. 38-39).

Where the associate degree is accepted for transfer *in toto*, the graduates move into upper division without penalty. However, vocational course credits generally do not apply toward academic baccalaureate degrees. In these cases, only the general education portions of SOCAD degrees are transferable.

THREE MAJOR PROJECTS TO IMPROVE THE ARTICULATION PROCESS

UCCTOP. A volume published in 1982 called for a revitalization of the study of articulation and transfer and for a new period of research and implementation (Kintzer, 1982b, p. 109). The Urban Community College Transfer Opportunities Program (UCCTOP) is a first step toward that goal. Supported by a substantial financial commitment from the Ford Foundation, the purpose of UCCTOP is to help community colleges strengthen their academic transfer programs and support services for transfer aspirants (Ford Foundation, 1984, p. 1). Following the design strategy, projects of 24 urban community colleges were accepted for initial funding, and a few are to be approved for full implementation over a three-year period beginning Fall 1984.

The potential value of the Ford-sponsored project can be viewed from several perspectives:

1. The initially submitted projects are comprehensive. Virtually

all include components on articulation such as orientation for potential transfers, counseling, faculty development, improved information exchange and dissemination.

2. Many of the original set of proposals focus on collaboration with high schools where, in our judgment, joint efforts must begin.
3. Considerable attention has been given to curriculum reform, such as integrated and interdisciplinary courses and programs centered on nontraditional students, including minority groups.
4. Institutions already involved have met on at least two occasions to "discuss common problems, test new initiatives . . . and . . . become more confident and adept . . ." (Ford Foundation, 1984, p. 4).

California Transfers. An emphasis on transfer announced in January 1984 by the California Community College State Board of Governors has resulted in *Transfer Education*, a document prepared by the Analytical Studies Unit. The report is a thorough and detailed examination of transfer activity, including numbers rates, intercollege differences, and transfer student performance. A formula developed for assessing transfer rates is detailed in the document. This regression model permits the analysis of a variety of variables on the transfer rate and should assist research units in other states now initiating transfer research. Investigation in a number of areas representing gaps in knowledge is a further contribution, calling attention to unstudied questions in articulation as well as transfer (California Community Colleges, 1984, pp. 39-41).

WICHE. A third major effort coordinated by the Western Interstate Commission for Higher Education (WICHE) is focused on articulation and transfer between two and four-year schools. Institutions in Arizona, California, Colorado, and New Mexico—selected for their high minority populations and high two-year college enrollments—are involved in this FIPSE-funded project. All four states are testing and adapting a student/staff user computer system to provide current and comprehensive information about courses, transfer credits, and programs. The system is being developed at the University of California/Irvine (UCI) for use between UCI and the Los Angeles Community College District.

Each cooperating state has also identified a secondary project that addresses a specific weakness in its present articulation process. In Arizona, a faculty articulation committee handbook has been

prepared and is now at the final draft state. In Colorado, the Guaranteed Student Transfer Program has been developed and is being piloted. Students who begin their postsecondary education at the Community College of Denver may negotiate a contract that guarantees them upper-division placement at Colorado State University upon satisfactory completion of a prescribed curriculum at the community college. New Mexico's institutions are currently developing articulation agreements in computer science, mathematics, allied health, business, agriculture and engineering. Statewide task forces have been organized by discipline to develop those agreements. California has been moving toward a system of early identification of potential transfer students. The FIPSE project, coordinated through the California Postsecondary Education Commission, is using Project Access as a key component of a State matriculation plan.

Opportunities for dialogue in these two major projects, together with the ensuing exchange of information beyond the participating institutions, may herald a new national emphasis on articulation and transfer.

CURRENT TRENDS

A summary of current trends in the area of articulation and transfer would need to emphasize:

1. The continuing demand on the part of the students for clearly-stated policies and guidelines providing for smooth movement from one level of education to another.
2. The tendency for these policies and guidelines to become officially adopted by governing boards, by coordinating boards, by institutional management, by legislatures, and by other operating agencies.
3. The increased student concern for receiving full credit for all courses and other related experiences that they have completed — experiences that may be far removed from traditional degree requirements.
4. The emphasis upon improving articulation and transfer between high schools and colleges through advanced placement, dual enrollment, early admission, and more stringent requirements for graduation.
5. A tendency to rely increasingly upon testing as a placement device, as a recognition of a level of completion, and as a basis for admissions to a higher level of education.

6. An increasing concern for the development of organized procedures for the recognition of experiences outside regularly organized courses.

Higher education has, like other areas of the modern society, become more client-centered and more quality conscious. These two concepts are often in conflict. Articulation and transfer have been a concern of both community college leadership and university leadership, but for different reasons. The future will show an increasing concern but still for different reasons.

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